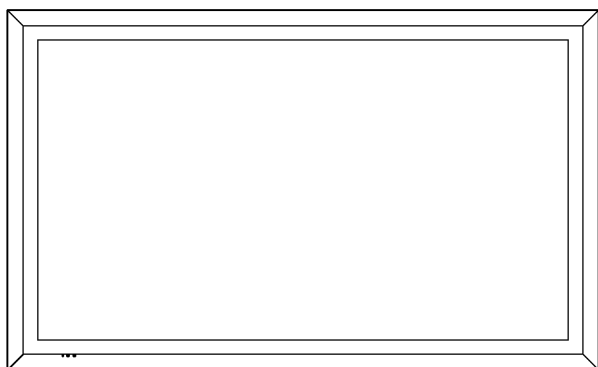


Service Manual

FULL HD LCD Display



Model No. TH-42LFP30W
TH-47LFP30W

Manufacturing ID No. and Destination
 TH-42/47LFP30WU : North and Latin America
 TH-42/47LFP30WA : Oceania
 TH-42/47LFP30W : Other

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by  in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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1 Safety Precautions

1.1. General Guidelines

1. When conducting repairs and servicing, do not attempt to modify the equipment, its parts or its materials.
2. When wiring units (with cables, flexible cables or lead wires) are supplied as repair parts and only one wire or some of the wires have been broken or disconnected, do not attempt to repair or re-wire the units. Replace the entire wiring unit instead.
3. When conducting repairs and servicing, do not twist the Fasten connectors but plug them straight in or unplug them straight out.
4. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
5. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
6. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.2. Touch-Current Check

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a measuring network for touch currents between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use Leakage Current Tester (Simpson 228 or equivalent) to measure the potential across the measuring network.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reserve the AC plug in the AC outlet and repeat each of the above measure.
6. The potential at any point (TOUCH CURRENT) expressed as voltage U_1 and U_2 , does not exceed the following values:

For a. c.: $U_1 = 35 \text{ V}$ (peak) and $U_2 = 0.35 \text{ V}$ (peak);

For d. c.: $U_1 = 1.0 \text{ V}$,

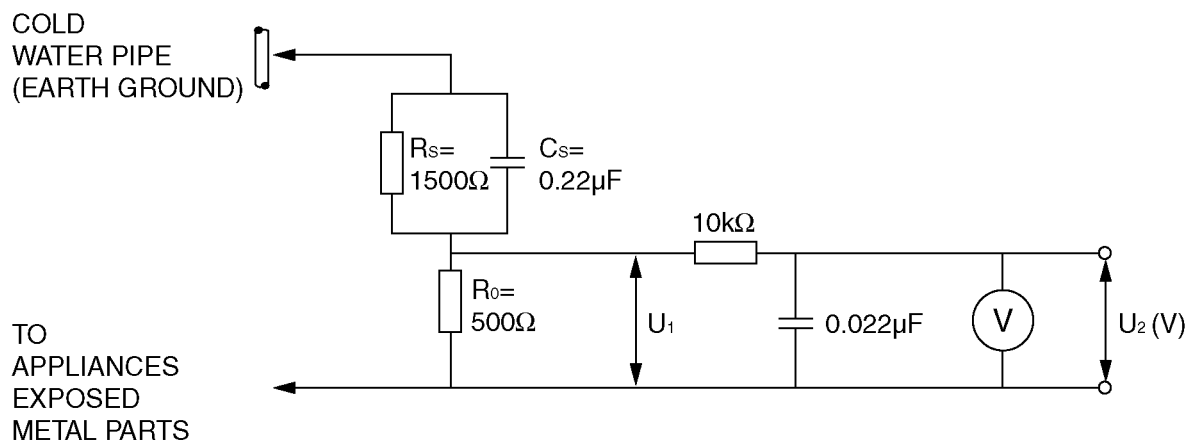
Note:

The limit value of $U_2 = 0.35 \text{ V}$ (peak) for a. c. and $U_1 = 1.0 \text{ V}$ for d. c. correspond to the values 0.7 mA (peak) a. c. and 2.0 mA d. c.

The limit value $U_1 = 35 \text{ V}$ (peak) for a. c. correspond to the value 70 mA (peak) a. c. for frequencies greater than 100 kHz .

7. In case a measurement is out of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

Measuring network for TOUCH CURRENTS



Resistance values in ohms (Ω)

V: Voltmeter or oscilloscope
(r.m.s. or peak reading)

Input resistance: $\geq 1 \text{ M}\Omega$

Input capacitance: $\leq 200 \text{ pF}$

Frequency range: 15 Hz to 1 MHz and d.c. respectively

NOTE - Appropriate measures should be taken to obtain the correct value in case of non-sinusoidal waveforms.

Figure 1

2 Warning

2.1. Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor “chip” components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as “anti-static (ESD protected)” can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise ham less motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

2.2. About lead free solder (PbF)

Note: Lead is listed as (Pb) in the periodic table of elements.

In the information below, Pb will refer to Lead solder, and PbF will refer to Lead Free Solder.

The Lead Free Solder used in our manufacturing process and discussed below is (Sn+Ag+Cu).

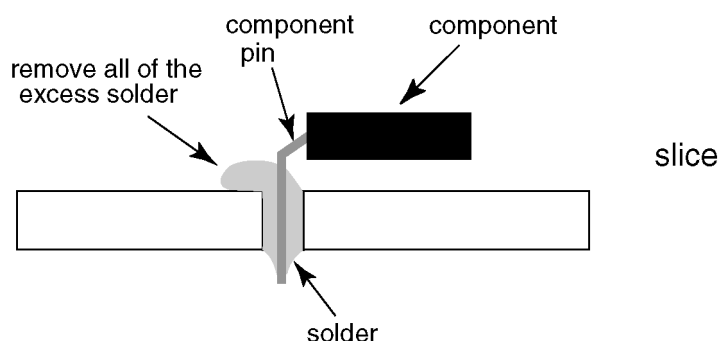
That is Tin (Sn), Silver (Ag) and Copper (Cu) although other types are available.

This model uses Pb Free solder in it's manufacture due to environmental conservation issues. For service and repair work, we'd suggest the use of Pb free solder as well, although Pb solder may be used.

PCBs manufactured using lead free solder will have the PbF within a leaf Symbol **PbF** stamped on the back of PCB.

Caution

- Pb free solder has a higher melting point than standard solder. Typically the melting point is 50 ~ 70 °F (30~40 °C) higher. Please use a high temperature soldering iron and set it to 700 ± 20 °F (370 ± 10 °C).
- Pb free solder will tend to splash when heated too high (about 1100 °F or 600 °C).
If you must use Pb solder, please completely remove all of the Pb free solder on the pins or solder area before applying Pb solder. If this is not practical, be sure to heat the Pb free solder until it melts, before applying Pb solder.
- After applying PbF solder to double layered boards, please check the component side for excess solder which may flow onto the opposite side. (see figure below)



Suggested Pb free solder

There are several kinds of Pb free solder available for purchase. This product uses Sn+Ag+Cu (tin, silver, copper) solder. However, Sn+Cu (tin, copper), Sn+Zn+Bi (tin, zinc, bismuth) solder can also be used.

0.3mm X 100g	0.6mm X 100g	1.0mm X 100g

2.3. Precautions for Installation

- Do not install by yourself. Please ask a installation professional or your dealer to install.
- This product complies with IP66 dust and water protection standard. Do not change or damage dust or water resistance of the product.
- Please note the dust and water resistance of this product does not guarantee damage or fault free.



CAUTION Using with dust or water resistance degraded causes fire, electric shock, or product damage.

This product complies with international standard IP rating (Ingress Protection) dust ingress protection level 6 and water ingress protection level 6.

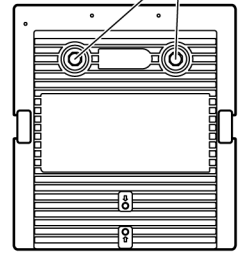
■ Precautions for handling pressure-adjusting caps

Do not loosen or remove the pressure-adjusting caps (2) for the terminal cover.
This will damage the cabinet airtightness.

Do not block the ventilation such as covering the pressure-adjusting caps.

- The pressure-adjusting caps are used to adjust the air pressure inside of the product.
Special material is used so that they let air pass but not liquid such as water.

Pressure-adjusting caps
Terminal cover



■ Terminal cover

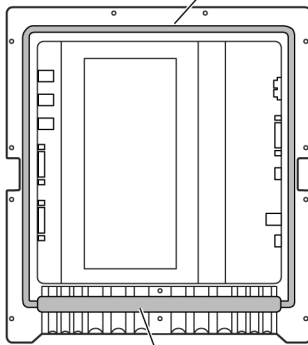
After connecting cable etc. of the device to the terminals, check if the terminal cover is sealed correctly and closed firmly using all the fixing screws when attaching the terminal cover.

To seal the terminal cover correctly, be aware of the following points:

Check if the fixing sealant is fixed in the correct position in the cover. Fixing sealant is an important part to seal the cable part.

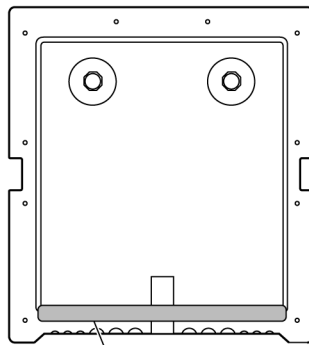
Terminal part on
main unit rear side

Fixing sealant



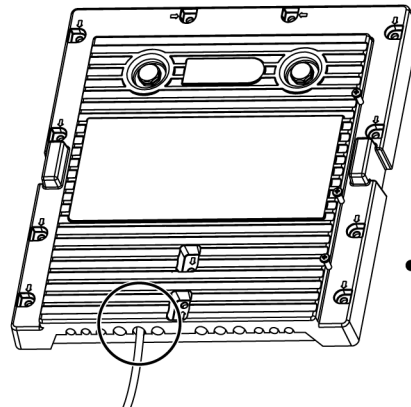
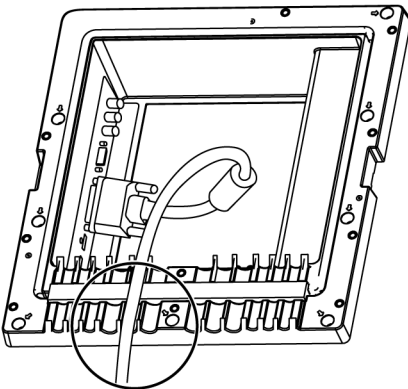
Fixing sealant

Terminal cover rear side



Fixing sealant

Stick the cable to the shape of the dent on the terminal strip base tightly.

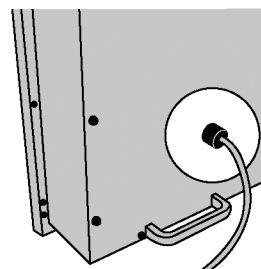


- The structure is to keep the airtightness by tucking the cable pulled out along the dent on the terminal strip base with both fixing sealant of the terminal strip base and terminal cover.

■ Power cable

To keep the waterproof property, do not loosen the part fixing the power cable to the rear plate.

Do not force to bend the protruding part of the power cable. This may cause disconnection.



■ Protective coating

Cabinet aluminum parts and rear plate are protected from corrosion with coating. Be careful not to damage the surface. In case the surface is damaged, corrosion may occur from there.

■ Installation position

Do not install the product to a place where the product is exposed to direct sunlight.

- If the screen is exposed to direct sunlight, the liquid crystal panel may have adverse effect.
- When direct sunlight is on the screen, black shadow may appear. This will disappear when the temperature drops.
- To avoid direct sunlight, installing a “canopy” above this product is recommended.
- To install the product long term in a special environment such as near a swimming pool, hot spring, or ocean, or in a factory uses chemicals or gases, please consult your local Panasonic dealer beforehand.

■ Installation conditions

To use the product in an environment where outdoor air temperature is lower than 39 °F (4 °C), make sure to set the “Winter Mode” to “On”. The inside temperature is kept constant and the startup can be performed smoothly.

Do not exhibit or use this product in a condition where water splashes on to it continuously for long time.

■ To install on a wall etc.

- Consult your dealer about fittings etc. beforehand.
- Choose a permanent position where the total weight of the product and fittings can be hold permanently. If the strength of the position is not sufficient, a serious accident such as fall may be caused.
- Do not install the product where a person can be hang or lean on, or a passer may collide into. Accident may be caused.
- Take measures for tipping over and fall with an assumption of a fitting or installation location failure.
- Installation strength may be degraded due to aging depends on the environment. Ask a installation professional to inspect or repair regularly.
- When an abnormality or fault such as loose screw is detected, ask an installation professional or your dealer immediately for repair.
- Panasonic will not be responsible for any damages from an accident such as defect of installation, improper use, modification, or natural disaster.

3 Service Navigation

3.1. Manufacturing ID No. and Destination

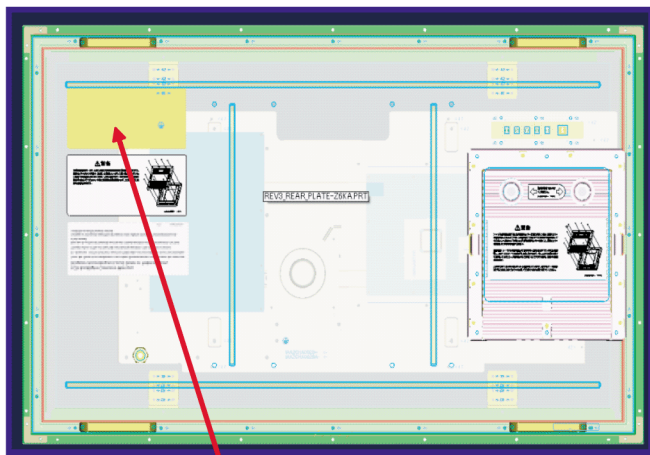
Destination can be confirmed by Manufacturing ID No. indicated in the Model Name Plate as following figure.

TH-42/47LFP30WU : North and Latin America

TH-42/47LFP30WA : Oceania

TH-42/47LFP30W : Other

The principal different points are AC power cord, Carton box, owners manual and set up guide.



Panasonic

FULL HD LCD Display

Полноэкранный ЖК-дисплей высокого разрешения
Полноэкранный РК-дисплей высокой четкости
Только новейшие жидкие кристаллические дисплеи

Model No.
N° de modèle
Модель No **TH-47LFP30W**

Manufactured

Serial No.
No. de série
Серийный No
Серийный номер

Manufacturing ID No.
N° ID de fabrication

Panasonic Corporation
Панасоник Корпорейшн
Панасоник Корпорейшн
Панасоник Корпорейшн

Made in Indonesia
Произведено в Индонезии
Вироблено в Індонезії
Індонезіяда жасалган

Power Rating
Аварийная мощность
Допустимая мощность
Корпуса модели

220-240 V ~ : 1.5 A 50/60 Hz
220-240 B ~ : 1.5 A 50/60 Hz

BEAB Approved

SAFETY

CAUTION: DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE.
NEVER SERVING TO QUALIFIED SERVICE PERSONNEL ONLY.

VORSICHT: VOR ENTFERNEN DER RÜCKWAND STECKER AUS DER NETZSTECKDOSE ZIEHEN.

ATTENTION: RETIRER LA RICHE MÂLE DE LA PRISE DE COURANT AVANT D'ENLEVER LE PANNEAU ARRIERE.

ATTENZIONE: PRIMA DI TOGLIERE LO SCHERMALE, L' APPARECCHIO DEVE ESSERE STACCATO DALLA PRESA DI CORRENTE. QUESTO SCHERMALE DEVE ESSERE RIMOSSO SOLAMENTE DA TECNICI QUALIFICATI.

ATENCIÓN: NO ABRIR SIN ANTES DESCONECTAR LA TENSION DE LA RED.

UWAGA! W ODBIORNIKU WYSTĘPUJE WYSOKIE NAPIĘCIE. PRZED ZODJĘCIEM POKRYWY WYCIĄGAĆ WTYCZKĘ Z GNAZDIA SIŁOWEGO.

VIGYAZAT! MAGYASZULTSÉGI! A KÉSZÜLÉK BUKKOLATÁNAK ELTÁVOLÍTÁSA ÉLETVESZÉLYES!

POZOR! V PRÍSTROJI JE VYSOKÉ NAPĚTÍ. PŘED ODŠTUPNUTÍM KRYTU NUTNO VYJMOUT VÍDULCI SÍTOVÉHO PŘÍVODU ZE ZÁSOVKY.

POZORI! V PRÍSTROJI JE VYSOKÉ NAPÄTIE. PŘED ODSTRANENÍM KRYTU JE POTŘEBNÉ VYTÁHNUŤ VÍDULCU SÍTOVÉHO PRÍVODU.

ОСТОРОЖНО! НЕ СНИМАЙТЕ ЭТУ КРЫШКУ. ОТКРЫТЫЕ ЧАСТИ, КОТОРЫЕ ОБСЛУЖИВАЮТСЯ ПОЛЬЗОВАТЕЛЕМ, ПОЛУЧАЮТ СЕРЬЕЗНОЕ ОБСЛУЖИВАНИЕ ТОЛЬКО КВАЛИФИЦИРОВАННЫМ СЕРВИСНЫМ ПЕРСОНАЛОМ.

УВАГА! НЕ ВІДКРИВАЙТЕ ЦЮ КРИШКУ. ВІСВЕРТНУТІ ЧАСТИ, ЩО ОБСЛУГОВУЮТЬСЯ КОРИСТУВАЧЕМ, ДОПУСКАЮТ СЕРЬОЗНЕ ОБСЛУГОВУВАННЯ ТІЛЬКИ КВАЛІФІКОВАНОМУ СЕРВІСНОМУ ПЕРСОНАЛУ.

AGARTANÁLIS! ÉLES KAPCSOLATOK LEHETNEK. CSAK KÉPEZETT SZERVIZTEK ÉRDEKELTEI ÉRDEKELTÉK. A KÉSZÜLÉK KARBANTARTÁSÁNAK KÉPEZETT SZERVIZTEK ÉRDEKELTEI ÉRDEKELTÉK.

>PP<
1AA6P454004-E

3.2. Applicable signals

PC signals

*Mark: Applicable input signal

	Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)	RGB IN (Dot clock (MHz))	PC IN (Dot clock (MHz))	DVI-D IN (Dot clock (MHz))	HDMI1 HDMI2
1	640x400@70Hz	31.46	70.07	*(25.17)	*(25.17)	*(25.17)	
2	640x400@85Hz	37.86	85.08	*(31.5)	*(31.5)	*(31.5)	
3	640x480@60Hz	31.43	59.88	*(25.15)	*(25.15)	*(25.15)	
4	640x480@60Hz	31.47	59.94	*(25.18)	*(25.18)	*(25.18)	*
5	640x480@67Hz	35.00	66.67	*(30.24)	*(30.24)	*(30.24)	
6	640x480@72Hz	37.86	72.81	*(31.5)	*(31.5)	*(31.5)	
7	640x480@75Hz	37.50	75.00	*(31.5)	*(31.5)	*(31.5)	
8	640x480@85Hz	43.27	85.01	*(36.0)	*(36.0)	*(36.0)	
9	720x400@70Hz	31.47	70.08	*(28.32)	*(28.32)	*(28.32)	
10	800x600@55Hz	34.50	55.38	*(35.33)	*(35.33)	*(35.33)	
11	800x600@56Hz	35.16	56.25	*(36.0)	*(36.0)	*(36.0)	
12	800x600@60Hz	37.88	60.32	*(40.0)	*(40.0)	*(40.0)	*
13	800x600@60Hz	38.00	60.51	*(40.13)	*(40.13)	*(40.13)	
14	800x600@72Hz	48.08	72.19	*(50.0)	*(50.0)	*(50.0)	
15	800x600@75Hz	46.88	75.00	*(49.5)	*(49.5)	*(49.5)	
16	800x600@85Hz	53.67	85.06	*(56.25)	*(56.25)	*(56.25)	
17	852x480@60Hz	31.47	59.94	*(33.54)	*(33.54)	*(34.24)	
18	1,024x768@50Hz	39.55	50.00	*(51.89)	*(51.89)	*(51.89)	
19	1,024x768@60Hz	48.36	60.00	*(65.0)	*(65.0)	*(65.0)	*
20	1,024x768@60Hz	48.50	60.02	*(64.99)	*(64.99)	*(65.18)	
21	1,024x768@70Hz	56.48	70.07	*(75.0)	*(75.0)	*(75.0)	
22	1,024x768@75Hz	60.24	74.93	*(80.0)	*(80.0)	*(80.0)	
23	1,024x768@75Hz	60.02	75.03	*(78.75)	*(78.75)	*(78.75)	
24	1,024x768@75Hz	61.01	75.70	*(80.05)	*(80.05)	*(81.0)	
25	1,024x768@85Hz	68.68	85.00	*(94.5)	*(94.5)	*(94.5)	
26	1,024x768@120Hz	97.55	119.99		*(115.5)	*(115.5)	
27	1,066x600@60Hz	37.64	59.94	*(53.0)	*(53.0)	*(53.0)	
28	1,152x864@60Hz	53.70	60.00	*(81.62)	*(81.62)	*(81.62)	
29	1,152x864@75Hz	67.50	75.00	*(108.0)	*(108.0)	*(108.0)	
30	1,152x900@65Hz	61.20	65.20	*(92.0)	*(92.0)	*(92.0)	
31	1,152x900@66Hz	61.85	66.00	*(94.5)	*(94.5)	*(94.5)	
32	1,152x900@75Hz	71.40	75.60	*(105.1)	*(105.1)	*(105.1)	
33	1,280x768@60Hz	47.78	59.87	*(79.50)	*(79.50)	*(79.50)	
34	1,280x800@50Hz	41.20	50.00	*(68.55)	*(68.55)	*(68.55)	
35	1,280x960@60Hz	60.00	60.00	*(108.0)	*(108.0)	*(108.0)	
36	1,280x960@85Hz	85.94	85.00	*(148.5)	*(148.5)	*(148.5)	
37	1,280x1,024@50Hz	52.70	50.00	*(89.38)	*(89.38)	*(89.38)	
38	1,280x1,024@60Hz	63.34	59.98	*(108.18)	*(108.18)	*(108.18)	
39	1,280x1,024@60Hz	63.90	60.00	*(107.35)	*(107.35)	*(107.35)	
40	1,280x1,024@60Hz	63.37	60.01	*(107.5)	*(107.5)	*(107.5)	
41	1,280x1,024@60Hz	63.74	60.02	*(108.1)	*(108.1)	*(108.1)	
42	1,280x1,024@60Hz	63.98	60.02	*(108.0)	*(108.0)	*(108.0)	*
43	1,280x1,024@60Hz	63.79	60.18	*(108.19)	*(108.19)	*(108.19)	
44	1,280x1,024@66Hz	70.66	66.47	*(119.84)	*(119.84)	*(119.84)	
45	1,280x1,024@75Hz	79.98	75.02	*(135.0)	*(135.0)	*(135.0)	
46	1,280x1,024@76Hz	81.13	76.11	*(135.0)	*(135.0)	*(135.0)	
47	1,280x1,024@85Hz	91.15	85.02		*(157.5)	*(157.5)	
48	1,360x768@60Hz	47.71	60.02	*(85.5)	*(85.5)	*(85.5)	
49	1,366x768@50Hz	39.55	50.00	*(69.92)	*(69.92)	*(69.92)	
50	1,366x768@60Hz	48.36	60.00	*(86.71)	*(86.71)	*(87.44)	
51	1,400x1,050@60Hz	65.12	59.91	*(121.38)	*(121.38)	*(122.43)	
52	1,400x1,050@60Hz	65.32	59.98	*(121.75)	*(121.75)	*(121.75)	
53	1,400x1,050@60Hz	65.35	60.12	*(121.81)	*(121.81)	*(121.85)	
54	1,400x1,050@75Hz	82.28	74.87	*(156.0)	*(156.0)	*(156.0)	
55	1,600x1,200@60Hz	75.00	60.00	*(162.0)	*(162.0)	*(162.0)	
56	1,920x1,080@60Hz	67.50	60.00	*(148.5)	*(148.5)	*(148.5)	
57	1,920x1,200@60Hz	74.04	59.95		*(154.0)	*(154.0)	
58	Macintosh13" (640x480)	35.00	66.67	*(30.24)	*(30.24)	*(30.24)	
59	MacintoshLC13" (640x480)	34.97	66.60	*(31.33)	*(31.33)	*(31.33)	
60	Macintosh16" (832x624)	49.72	74.55	*(57.28)	*(57.28)	*(57.28)	
61	Macintosh19" (1,024x768)	60.24	75.08	*(80.0)	*(80.0)	*(80.0)	
62	Macintosh21" (1,152x870)	68.68	75.06	*(100.0)	*(100.0)	*(100.0)	
63	Macintosh II (1,280x1,024)	80.00	75.00	*(134.4)	*(134.4)	*(135.2)	

Component signals***Mark: Applicable input signal**

	Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)	COMPONENT IN (Dot clock (MHz))	DVI-D IN (Dot clock (MHz))	HDMI1 HDMI2
1	525(480)/60i	15.73	59.94	* (13.5)	* (27.0)	*
2	525(480)/60p	31.47	59.94	* (27.0)	* (27.0)	*
3	625(575)/50i	15.63	50.00	* (13.5)		
4	625(576)/50i	15.63	50.00		* (27.0)	*
5	625(575)/50p	31.25	50.00	* (27.0)		*
6	625(576)/50p	31.25	50.00		* (27.0)	*
7	750(720)/60p	45.00	60.00	* (74.25)	* (74.25)	*
8	750(720)/50p	37.50	50.00	* (74.25)	* (74.25)	*
9	1,125(1,080)/60p	67.50	60.00	* (148.5)*1	* (148.5)	*
10	1,125(1,080)/60i	33.75	60.00	* (74.25)*1	* (74.25)	*
11	1,125(1,080)/50p	56.25	50.00	* (148.5)*1	* (148.5)	*
12	1,125(1,080)/50i	28.13	50.00	* (74.25)*1	* (74.25)	*
13	1,125(1,080)/24sF	27.00	48.00	* (74.25)*2		
14	1,125(1,080)/30p	33.75	30.00	* (74.25)*1	* (74.25)	*
15	1,125(1,080)/25p	28.13	25.00	* (74.25)*1	* (74.25)	*
16	1,125(1,080)/24p	27.00	24.00	* (74.25)*1	* (74.25)	*

*1: Based on SMPTE 274M standard.

*2: Based on SMPTE RP211 standard.

Video signals (VIDEO)

	Signal name	Horizontal frequency(kHz)	Vertical frequency(Hz)
1	NTSC	15.73	59.94
2	PAL	15.63	50.00
3	PAL60	15.73	59.94
4	SECAM	15.63	50.00
5	NTSC 4.43	15.73	59.94
6	PAL N	15.63	50.00
7	PAL M	15.73	59.94

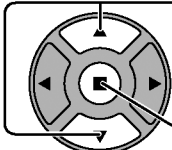
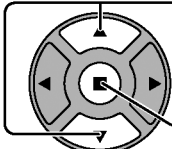
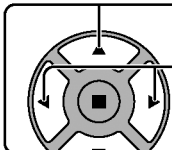
4 Specifications

	TH-42LFP30W		TH-47LFP30W	
	For USA, Canada and Mexico	For Europe and Asia	For USA, Canada and Mexico	For Europe and Asia
Power Source	110 - 127 V AC, 50/60Hz	220 - 240 V AC, 50/60Hz	110 - 127 V AC, 50/60Hz	220 - 240 V AC, 50/60Hz
Power Consumption				
Power on	250 W	240 W	300 W	290 W
Stand-by condition (Winter Mode:Off)	Save off 0.2 W, Save on 0.1 W	Save off 0.3 W, Save on 0.2 W	Save off 0.2 W, Save on 0.1 W	Save off 0.3 W, Save on 0.2 W
Stand-by condition (Winter Mode:On)	Backlight Off 40 W Backlight On 80 W	Backlight Off 40 W Backlight On 80 W	Backlight Off 40 W Backlight On 100 W	Backlight Off 40 W Backlight On 100 W
Power off condition	0.1 W	0.2 W	0.1 W	0.2 W
LCD Display panel	42 inch IPS panel, 16:9 aspect ratio		47 inch IPS panel, 16:9 aspect ratio	
Screen size	36.6 inch (W) × 20.5 inch (H) × 42.0 inch (diagonal) / 930 mm (W) × 523 mm (H) × 1,067 mm (diagonal)		40.9 inch (W) × 23.0 inch (H) × 46.9 inch (diagonal) / 1,039 mm (W) × 584 mm (H) × 1,192 mm (diagonal)	
(No. of pixels)	2,073,600 (1,920 (W) × 1,080 (H)) [5,760 × 1,080 dots]		2,073,600 (1,920 (W) × 1,080 (H)) [5,760 × 1,080 dots]	
Operating condition				
Temperature	32 °F - 104 °F / 0 °C - 40 °C (during Winter Mode:- 4 °F - 104 °F / - 20 °C - 40 °C)			
Applicable signals				
Colour System	NTSC, PAL, PAL60, SECAM, NTSC 4.43, PAL M, PAL N			
Scanning format	525 (480) / 60i • 60p, 625 (575) / 50i • 50p, 750 (720) / 60p • 50p, 1125 (1080) / 60i • 60p • 50i • 50p • 24p • 25p • 30p • 24sF			
PC signals	VGA, SVGA, XGA, SXGA UXGA (compressed) Horizontal scanning frequency 30 - 110 kHz Vertical scanning frequency 48 - 120 Hz			
Connection terminals				
AV IN	VIDEO	BNC	1.0 Vp-p (75-ohm)	
	AUDIO L-R	RCA Pin jack × 2	0.5 Vrms	
HDMI 1/2		TYPE A Connector		
COMPONENT / RGB IN	G/Y	BNC	with sync 1.0 Vp-p (75-ohm)	
	B/P _B /C _B	BNC	0.7 Vp-p (75-ohm)	
	R/P _R /C _R	BNC	0.7 Vp-p (75-ohm)	
	AUDIO L-R	RCA Pin jack × 2	0.5 Vrms	
DVI-D IN		DVI-D 24 Pin	Compliance with DVI Revision 1.0	
		Content Protection	Compatible with HDCP 1.1	
PC IN	AUDIO	Stereo mini jack (M3) × 1	0.5 Vrms, Shared with PC IN	
		High-Density Mini D-sub 15 Pin	G with sync 1.0 Vp-p (75-ohm)	
			G without sync 0.7 Vp-p (75-ohm)	
			B:0.7 Vp-p (75-ohm)	
			R:0.7 Vp-p (75-ohm)	
			HD / VD:1.0 - 5.0 Vp-p (high impedance)	
			0.5 Vrms, Shared with DVI-D IN	
SERIAL	AUDIO	Stereo mini jack (M3) × 1		
		External Control Terminal		
EXT SP		D-sub 9 Pin	RS-232C compatible	
		8-ohm, 10 W [5 W + 5 W] (10 % THD)		
Dimensions (W × H × D)	41.3 inch × 25.3 inch × 6.3 inch / 1,049 mm × 642 mm × 158 mm		45.8 inch × 27.8 inch × 6.3 inch / 1,162 mm × 706 mm × 158 mm	
Mass (weight)	approx. 83.8 lbs / 38.0kg		approx. 99.2 lbs / 45.0kg	
Accessories Supplied				
Remote Control Transmitter	N2QAYB000535			
Batteries	R6 (UM3) Size × 2			

Notes:

- Design and specifications are subject to change without notice. Mass and dimensions shown are approximate.
- This equipment complies with the EMC standards listed below.
EN55022, EN55024, EN61000-3-2, EN61000-3-3.

5 Operating Instructions

- 1  Press to display the Setup menu.
- 2  Press to select "OSD Language".
Press for more than 3 seconds.
- 3  Press to select "Options".
Press to display the Options menu.
- 4  Press to select your preferred menu.
Press to adjust the menu.
- 5  Press to exit from Options menu.

Options 1/2	
On screen display	On
Initial input	Off
Failover input	Off
Initial VOL level	Off 0
Maximum VOL level	Off 0
Input lock	Off
Button lock	Off
Remocon User level	Off

Options 2/2	
Off-timer function	Enable
Initial Power Mode	Normal
Power On Screen Delay	Off
Clock Display	Off
Power On Message (No activity power off)	On
Winter Mode	Off
Power Switch Lock	Off

Normalisation

When both main unit buttons and remote control are disabled due to the "Button lock" or "Remocon User level" adjustments, set all the values "Off" so that all the buttons are enabled again.

Press the  button on main unit together with  button on the remote control and hold for more than 5 seconds. The "Shipping" menu is displayed and the lock is released when it disappears.

Item	Adjustments
On screen display	On: Displays all the following on screen. • Power on display • Input signal switch display • No signal display • Mute and the remaining time of off-timer after  was pressed. Off: Hides all the items above from view.
Initial input	Adjusts the input signal when the unit is turned on. Off ↔ VIDEO ↔ Component/RGB ↔ PC ↔ DVI ↔ HDMI1 ↔ HDMI2 ↔ Off Notes: • Only the adjusted signal is displayed. • This menu is available only when "Input lock" is "Off".
Failover input	When there is no signal, the specified input signal is automatically switched to. Off ↔ VIDEO ↔ Component/RGB ↔ PC ↔ DVI ↔ HDMI1 ↔ HDMI2 ↔ Off Notes: • When other than "Off" is set, "Input lock" will be grayed out and cannot be set. • When "Input lock" is set to other than "Off", this setting will be grayed out and cannot be set.
Initial VOL level	Press  button to adjust the volume when the unit is turned on. Off ↔ On Off: Sets normal volume. On: Sets your preferred volume. Notes: • When "Maximum VOL level" is "On", the volume can only be adjusted between 0 and your maximum range. • You can hear the changed volume regardless of your volume setting before opening the options menu if you adjust the volume when "Initial VOL level" is "On" and cursor is on the menu.
Maximum VOL level	Press  button to adjust the maximum volume. Off ↔ On Off: Sets auto maximum volume. On: Sets your preferred maximum volume. Notes: • If the "Maximum VOL level" is set lower than the "Initial VOL level", the "Initial VOL level" automatically becomes the same as the "Maximum VOL level". • The volume display can go up to 100 regardless of the settings. • You can hear the changed volume regardless of your volume setting before opening the options menu if you adjust the volume when "Maximum VOL level" is "On" and cursor is on the menu.

Item	Adjustments
Input lock	Locks the input switch operation. Off ↔ VIDEO ↔ Component/RGB ↔ PC ↔ DVI ↔ HDMI1 ↔ HDMI2 ↔ Off Notes: - Only the adjusted signal is displayed. - Input switch can be used when this is set to "Off".
Button lock	Off ↔ On ↔ MENU&ENTER Off: All the buttons on main unit can be used. MENU&ENTER: Locks  and  buttons on main unit. On: Locks all the button on main unit. Sets Button lock with the unit buttons in the following procedure. Off: Press  four times → Press  four times → Press  four times → Press  MENU&ENTER: Press  four times → Press  four times → Press  four times → Press  On: Press  four times → Press  four times → Press  four times → Press 
Remocon User level	Off ↔ User1 ↔ User2 ↔ User3 Off: You can use all of the buttons on the remote control. User1: You can only use , , , , ,  buttons on the remote control. User2: You can only use  button on the remote control. User3: Locks all the buttons on remote control.
Off-timer function	Enable: Enables the "Off-timer function". Disable: Disables the "Off-timer function". Note: When "Disable" is set, the Off-timer is cancelled.
Initial Power Mode	Normal ↔ On ↔ Standby Sets the power mode of the unit for when the power recovers from failure or after plugging off and in again. Normal: Power returns in as the same state as before the power interruption. Standby: Power returns in standby mode. (Power Indicator : red/orange) On: Power returns in power On. (Power Indicator : green) Note: When using multiple displays, "Standby" is preferred to be set in order to reduce a power load.
Power On Screen Delay	Off ↔ 1 ↔ 2 ↔ 3... ↔ 30 You can set the power-on delay time of the displays to reduce the power load, when you press  to turn on the multiple displays that are set together, for example, on MULTI DISPLAY system. Set each display's setting individually. Off: The display will be turned on at the same time as  is pressed. 1 to 30 (sec.): Set the power-on delay time (second). After pressing , the display will be powered on with time delay depending on this setting. Notes: - During this function is working, the power indicator is blinking green. - This function also works when the power recovers from failure or after plugging off and in again the power cord.
Clock Display	Off: Not display the clock. On: Display the clock. The clock is displayed at the lower left of the screen when  button is pressed. 10:00 Note: When "PRESENT TIME Setup" is not set, the clock is not displayed even if "Clock Display" is "On".
Power On Message (No activity power off)	Whether to show/hide No activity power off Precautions at the time of power ON is set. On: The warning precautions are shown at the time of power ON. Off: The warning precautions are not shown at the time of power ON. Note: This setting is enabled only if "No activity power off" is "Enable".
Winter Mode	Set this function to maintain the image quality when the product is used in a low temperature environment of 39 °F/4 °C or lower. Off: Normal standby operation On: Image is muted at standby and backlight is turned on when the inside temperature of the display is 32 °F/0 °C or lower to prevent decreasing the temperature. Backlight is turned off when the inside temperature is 50 °F/10 °C or higher. When this function is set to "On", the following message appears at standby. Winter mode is active. Notes: - Do not unplug the power cable while using the product with this function "On". - When this function is set to "On", the power consumption at standby is approx. 100 W. - Turn this function "Off" to use this product in an environment of 39 °F/4 °C or higher.
Power Switch Lock	Sets the lock setting for the display Power switch. On: Power switch operation is disabled. Off: Power switch operation is enabled.

6 Service Mode

6.1. Service Menu Function (1)

Service Menu Display Method

There are 2 display methods.

Method 1

While pressing the "Volume -" button on the unit, press the RECALL button on the remote control 3 times.
(If the interval when pressing the RECALL button exceeds 1 second, then it is disabled.)

Method 2

- 1) Press the OFF TIMER button and then set the off timer.
- 2) Press the volume button and then set the volume to "0."
- 3) While the volume bar is being displayed, press and hold the screen display button for 3 seconds.

The service information is displayed.

Internal Temperature

The internal temperature of the product is displayed.

Power Error Information

- The number of times that a power error has occurred is displayed.
- If a power error is detected, the settings switch to stand-by status.
- If the power is turned on with the remote control and the power error is detected 3 consecutive times, as a consequence, power on cannot be performed with remote control.
- The power button on the monitor unit can be used for power on/off.
- When the power on cannot be performed with the remote control, if the AC cord is disconnected, it resets this status.

Panel Used Time

The elapsed time the LCD panel is used is displayed.

Temperature Error

- The number of times that a temperature error has occurred is displayed.
- If a temperature error is detected, the settings switch to stand-by status.
- Recovery from stand-by status can be performed with the power button on the remote control.

FAN Information

If internal fan has a trouble like stopped, "NG" is displayed.

Digital Power Management

The power management function can be set by using the operations on the DVI input screen.

Press and select with the buttons ▲/▼, and setting can be performed by pressing the buttons ◀/▶.

Off: The power management function does not work on the DVI input screen

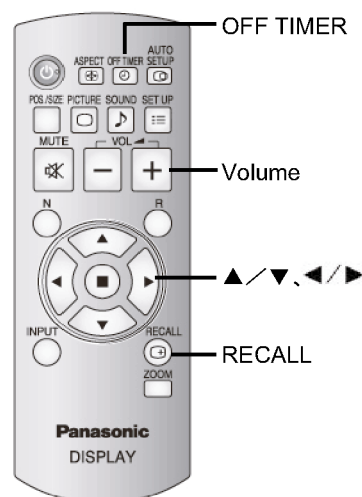
On: The power management function works on the DVI input screen

Caution:

When setting to on, the energy star and DPMS standard cannot be achieved because the power consumption during stand-by status increases.

Service Menu

Service	
Internal Temperature	35°C
Power Error Information	0
Panel Used Time	0 Day 0 Hour
Temperature Error	0
FAN Information	NG
Digital Power Management	Off
Software Ver.(Main)	1.000 LFP30
Software Ver.(Sub)	1.0.0 LFP30



6.2. Service Menu Function (2)

Special Menu

The product area can be set.

Special Menu Display Method

- 1) Display the service menu.
- 2) While pressing the monitor unit button "Volume -," press the "■" button on the remote control 3 times.

The "Special" menu is displayed.

(If the interval when pressing the "■" key exceeds 1 second, it is disabled)

Product Area Setting Method

Press the buttons ▲/▼ to select the "Area", and setting can be performed by pressing the buttons ◀/▶.

OFF: English (UK)

US: ENGLISH (US)

JP: Japanese

EU: English (UK)

ASIA: English (UK)

CN: Chinese

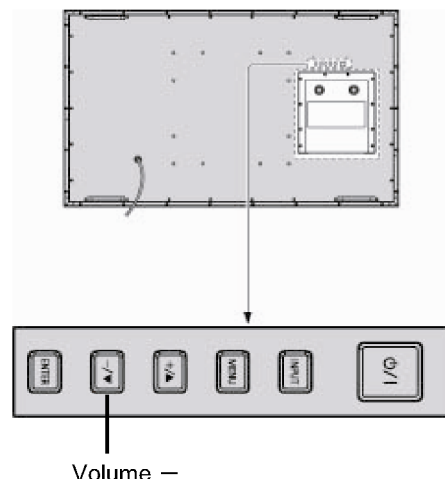
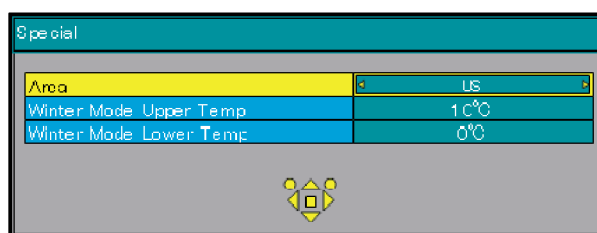
When set to the "US," the "Power Switch Lock" item on the "Options" menu displays, and the default value is set to "Off."

Upper and Lower Temperature Setting Method

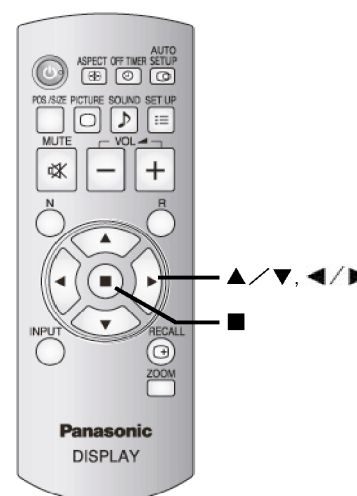
Press the buttons ▲/▼ to select "Lower Temperature" or "Lower Temperature", and press ◀/▶ buttons to set the temperature.

(-100°C ~ 100°C)

Special Menu



Volume -



Start can be performed with the auto display mode on the LCD panel.

6.3. Service Mode Function (1)

White Balance Check

White balance check and adjustments can be performed.

Service Mode Display Method

- 1) Display the service menu.
- 2) Display the special menu.
- 3) Press and hold down the button "■" on the remote control for more than 5 seconds.

The "Service mode" menu is displayed.

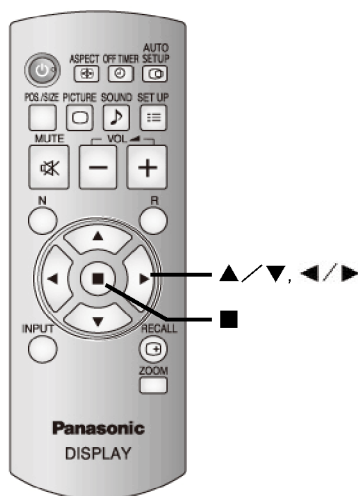
White Balance Adjustment Method

- 1) Press the buttons "▲/▼" on the remote control and select "Source."
- 2) Press the buttons "◀/▶" on the remote control and select "All."
- 3) Press the buttons "▲/▼" on the remote control and select "Properties."
- 4) Press the buttons "◀/▶" on the remote control and select "Red," "Green," or "Blue."
- 5) Press the buttons "▲/▼" on the remote control and select "Data."
- 6) Press the buttons "◀/▶" on the remote control and change the setting value.

White Balance Check Method

By setting the "Source" item to "All," and the "Properties" item to "White," the white balance adjustment value for "Red," "Green," and "Blue" can be referenced.

The elapsed time the LCD panel is used is displayed.



"Service Mode" menu

Service Mode	1.000 (M1)
	1.0.0
Source	All
Properties:	NormalRed
Data:	99

White Balance Adjustment

Service Mode	1.000 (M1)
	1.0.0
Source	All
Properties:	Red
Data:	85

White Balance Adjustment Check

Service Mode	1.000 (M1)	
	1.0.0	
Source	All	
Properties:	White	
Red 85	Green 85	Blue 85

Start can be performed with the auto display mode on the LCD panel.

6.4. Service Mode Function (2)

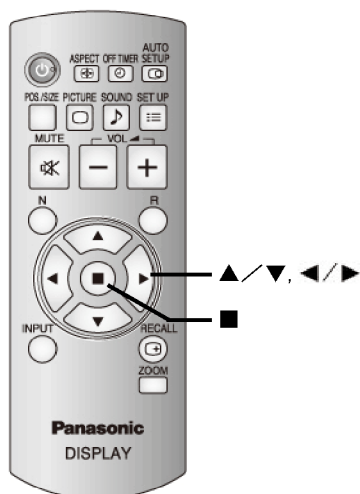
ADC Calibration Adjustment

An adjustment is performed when the LCD panel is replaced.

Adjustment Method

- 1) Display the "Service mode" menu.
- 2) Press the buttons "**▲/▼**" on the remote control and select "Source."
- 3) Press the buttons "**◀/▶**" on the remote control and select "All."
- 4) Press the buttons "**▲/▼**" on the remote control and select "Properties."
- 5) Press the buttons "**◀/▶**" on the remote control and select "ADC Calibration."
- 6) Press the buttons "**▲/▼**" on the remote control and select "Data."
- 7) By pressing the buttons "**◀/▶**" on the remote control, the auto adjustment starts.

Once the ADC Calibration adjustment starts, the item display for the "Data" item changes from "<<< >>>" to "ADC Calibration," and once the ADC Calibration adjustment is terminated, it returns to the "<<< >>>" display.
The elapsed time the LCD panel is used is displayed.



"Service Mode" menu

Service Mode	1.000 (M1)
	1.0.0
Source	All
Properties:	NormalRec
Data	99

ADC Calibration Display

Service Mode	1.000 (M1)
	1.0.0
Source	All
Properties:	ADC Calibration
Data:	Not Yet

Before ADC Calibration

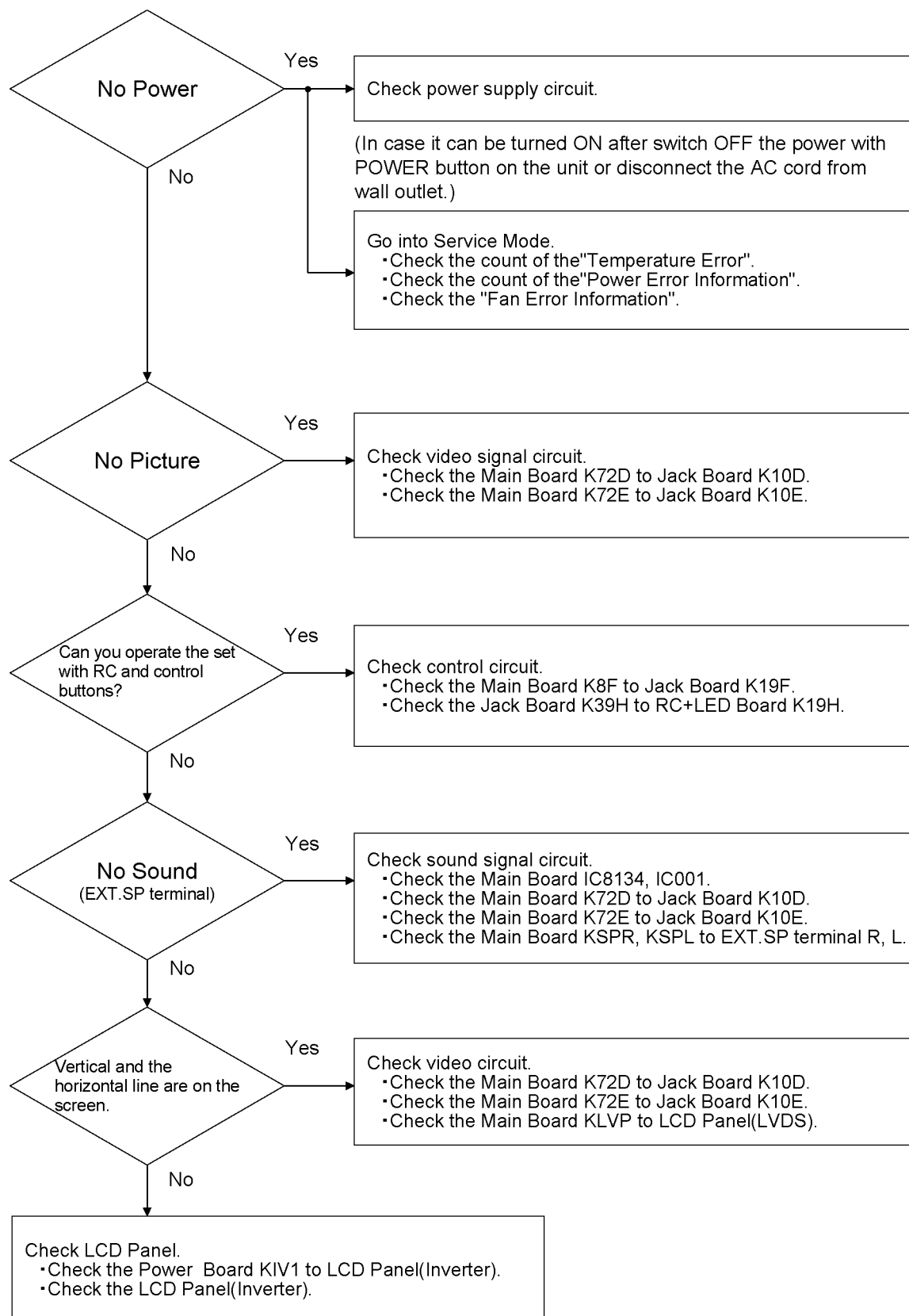
Service Mode	1.000 (M1)
	1.0.0
Source	All
Properties:	ADC Calibration
Data:	<<< >>>

During ADC Calibration

Service Mode	1.000 (M1)
	1.0.0
Source	All
Properties:	ADC Calibration
Data:	ADC Calibration

Start can be performed with the auto display mode on the LCD panel.

7 Troubleshooting Guide



8 Disassembly and Assembly Instructions

8.1. SERVICE INSTRUCTIONS

PRECAUTIONS

This unit is equipped with a liquid crystal display (LCD), and is designed to be dustproof and waterproof; therefore its cabinet is structurally airtight. If any parts (back plate, cabinet back, cabinet front, power cord outlet, etc.) except the AV covers, are disassembled, always carry out a test to ensure that the unit is airtight so as to be dustproof and waterproof after reassembly.

■ Gaskets

Gaskets (cushioning gasket tape) are fitted to this unit to reduce electromagnetic interference (EMI) radiation. After replacing or repairing parts, take care to replace the gaskets exactly as they were before.

■ Disassembly Precaution

- The screws used in this unit may vary depending on their position and function. It is important that the correct screw is used in the correct place. Using the incorrect screw will result in damage to the unit.
- The type and number of nuts and bolts shown in drawings (photos) is subject to change. Check nuts and bolts on actual unit when servicing.
- Circuit arrangement shown in drawings (photos) may differ to end products. Check circuit arrangement on the actual unit when servicing. After servicing, always leave the circuit arranged as it was before.

Special Tools and Equipments

1. Torque Wrench

For fastening the waterproof nut placed a hole at rear cover for AC cord

Nut Size: 36.2 mm

Tightening torque: 50 kgf • cm

Refer to Chapter 8.23 and 8.24

2. Torque Screw Driver

For fastening the pressure control caps at AV Cover

Nut size: 17 mm

Tightening torque: 6.12 kgf • cm

Refer to Chapter 8.21

3. Air tightness test jig, tools and equipment

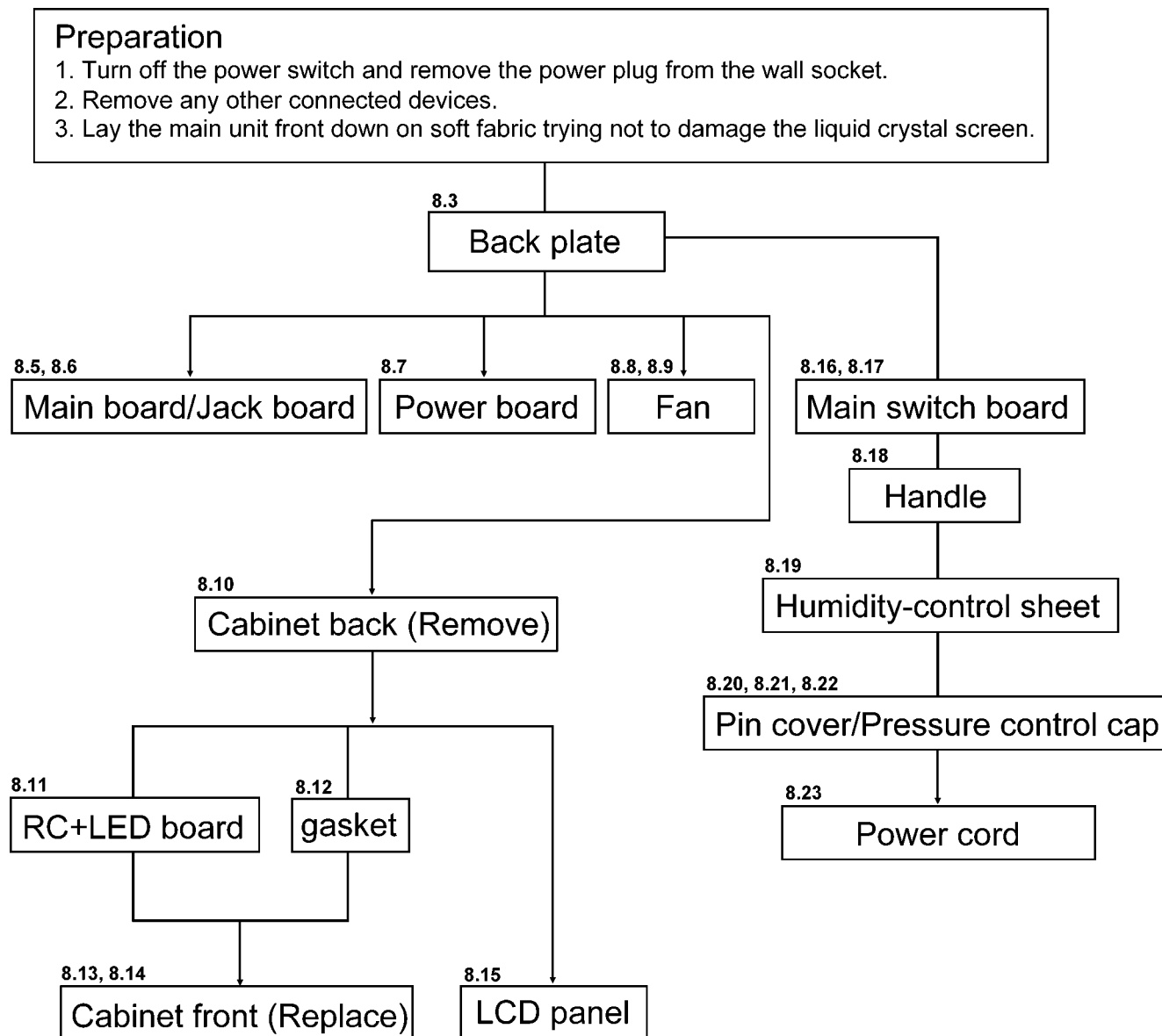
Purpose: To compliant with IP66 dustproof and water resistant protection, Air tightness test is required after disassemble.

Outline: Decrease air pressure inside of the unit and confirm the differential pressure by Manometer after fixed period.

Equipment: Manometer, Air tube, Pump / Compressor, Joint, etc.

8.2. Disassembly Procedure Chart

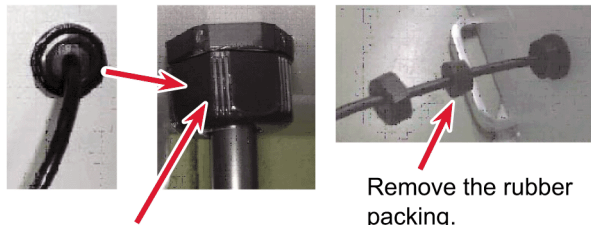
- The following chart shows which components to remove to detach parts for replacement.
- Follow this chart to disassemble the unit to replace parts efficiently.



8.3. Removing back plate

1. Turn to loosen the waterproof nut which secures the power cord onto the back plate and remove the nut.
2. Open the slit of the rubber packing which is located inside the waterproof nut to remove the rubber packing from the power cord.

Be careful not to pull the power cord while removing the back plate following this procedure.

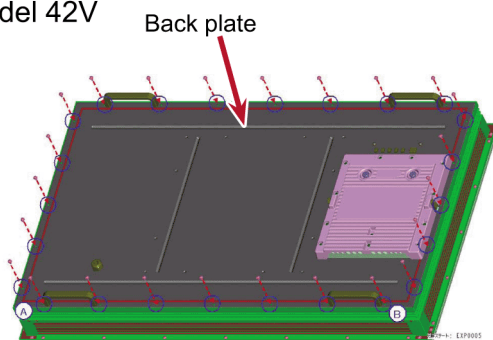


Loosen this part.

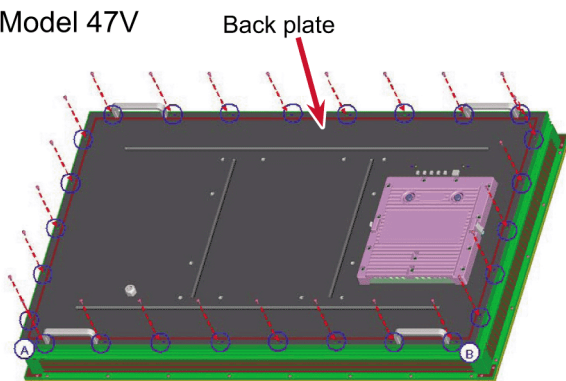
Remove the rubber packing.

3. Remove the screws which hold the back plate. (Model 47V: 26 screws; Model 42V: 24 screws) (SPECIAL SCREW 4X12)

Model 42V



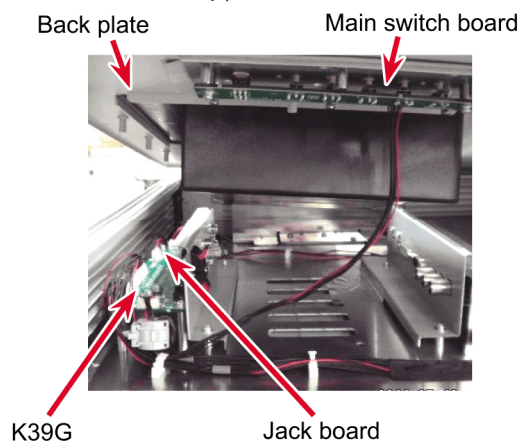
Model 47V



4. Hold handle and lift the back plate slightly.
5. Insert your hand through the opening gap while lifting the back plate. Detach the cable which runs from the main switch board mounted on the back plate, off the hook and

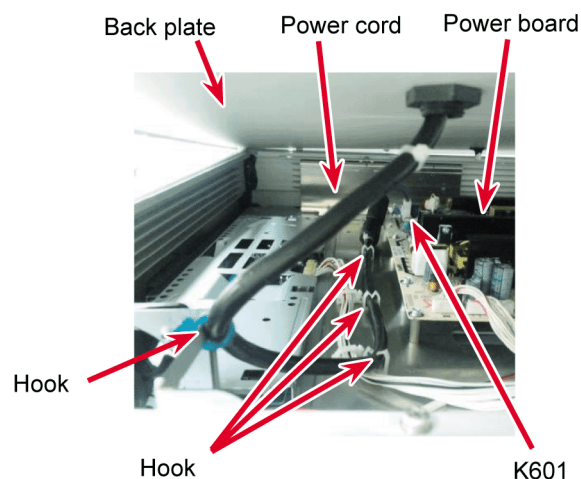
remove the connector K39G for the jack board.

(Photo view from the top)

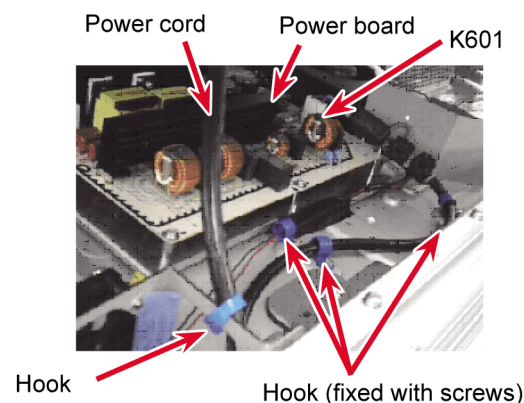


6. The back plate also can be lifted with the power cord running through it. If you remove the back plate together with the power cord, carry out the following procedure.
7. Detach the power cord off the hook, and remove the coupler K601 from the power board. Next, remove the screws which hold the earth pin for the power cord.

(Photo view from the bottom: Model 42V)



(Photo view from the bottom: Model 47V)

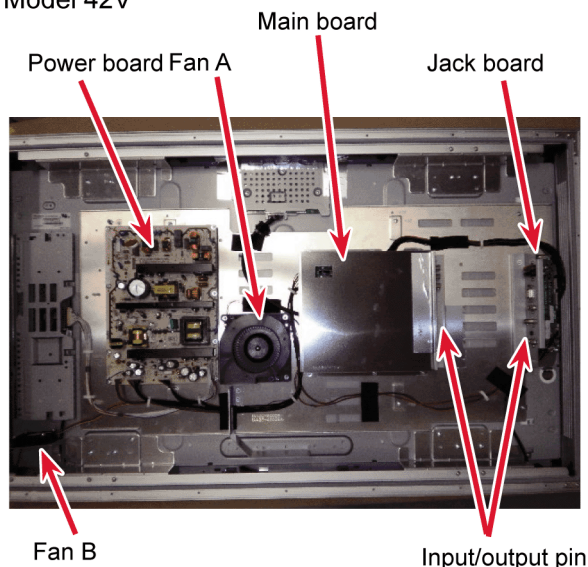


- For Model 47V, the hook for the power cord is fixed with screws. Undo screws to remove the hook.
8. Gently remove the back plate.

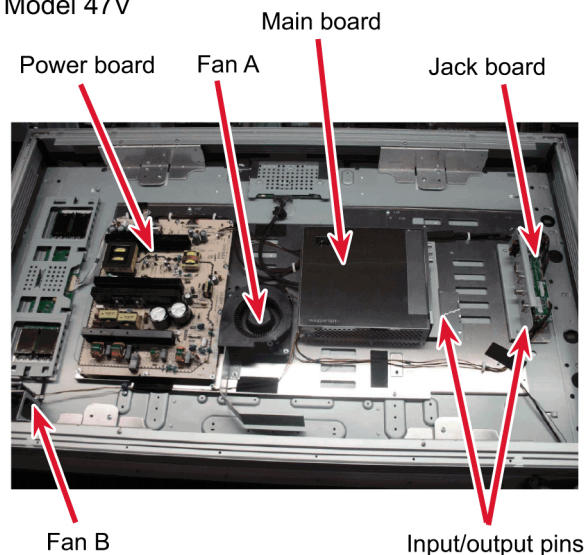
8.4. Layout of boards and parts

This unit is built so the board is exposed when back plate is removed.

Model 42V

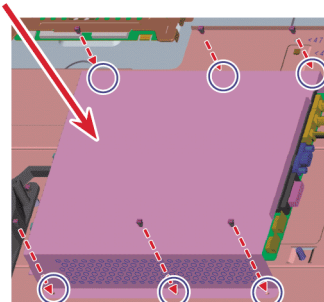


Model 47V

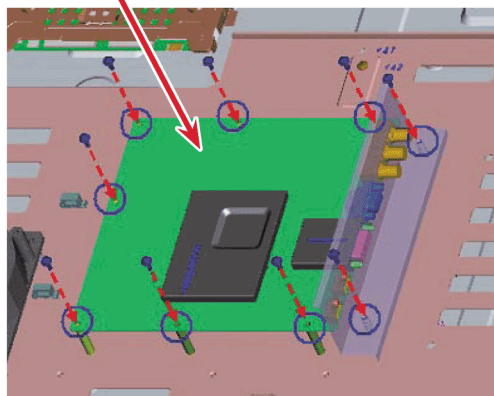


5. Replace the main board with the replacement board.

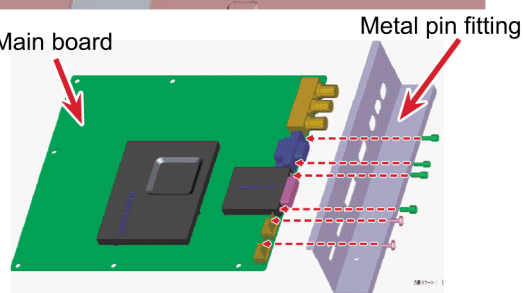
Protective cover



Main board



Main board



Precautions for removing and fitting the main board protective cover and metal pin fitting.

- Aluminium tape is affixed on the main board protective cover and metal pin fitting. Make sure that this aluminium tape remains in place while handling them. (170X50 mm: 1, 100X50 mm: 1)

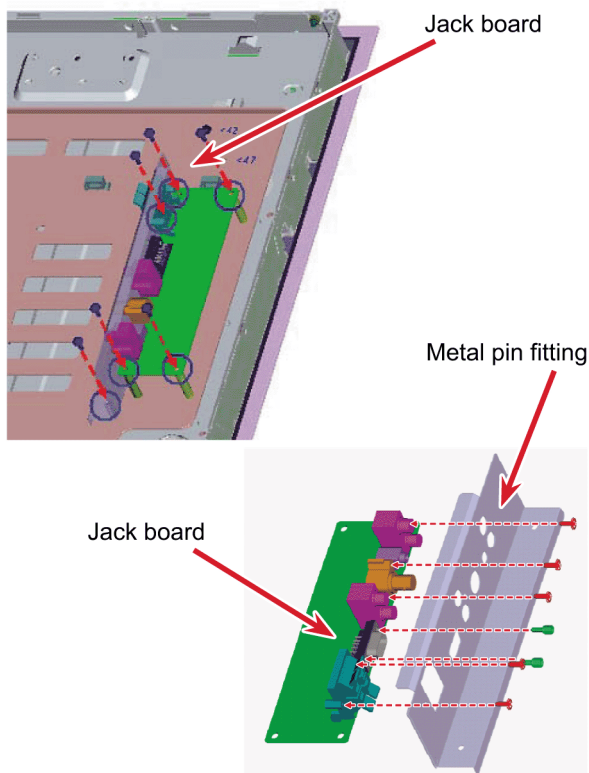
8.5. How to replace the main board

1. Remove 6 screws which hold the protective cover of the main board. (SCR PAN+SW+W 3X6)
2. Remove 9 screws which hold the main board and metal pin fitting. (SCR PAN+SW+W 3X10)
3. Detach the coupler which is connected to the main board, then gently remove the main board.
Coupler located inside the main board: K16C, KSPR, KSPL, KLVP, K16B, K16A, K8F, K72E, K72D, KFN1, KFN2
4. Remove the screws which hold the metal fitting on the pin section.
 - 1) Hexagonal nut x4: DVI IN pin, PC IN pin (SPECIAL SCREW)
 - 2) X2: HDMI pin (SCR PAN 3X6)

8.6. How to replace the jack board

1. Remove 6 screws which hold the jack board and metal pin fitting together. (SCR PAN+SW+W 3X10)
2. Detach the coupler which is connected to the jack board, then gently remove the jack board.
Coupler located inside the jack board: K39H, K39G, K19F, K10E, K10D, K001R, K001L
3. Remove the screws which hold the metal fitting on the pin section.
 - 1) Hexagonal nut X 2: SERIAL pin (SPECIAL SCREW)
 - 2) X 2: EXT SP pin, AV IN pin (SCR TPG BRZ 3X8)

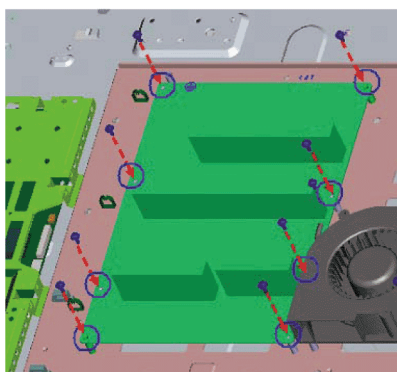
4. Replace the jack board with the replacement board.



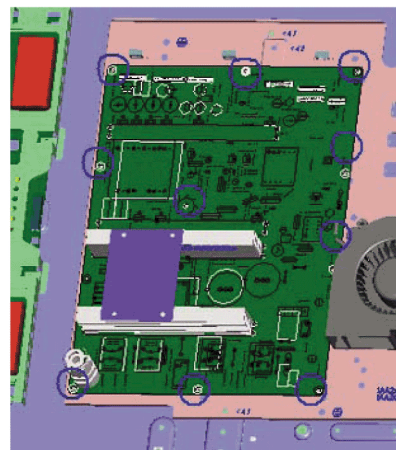
8.7. How to replace the power board

1. Detach the coupler which is connected to the power board.
Coupler located inside the power board: K601, KIV2, KIV1, K6C, K6B, K6A
2. Remove the screws (Model 47V: 10; Model 42V: 8) which hold the power board. (SCR PAN+SW+W 3X10)
3. Gently remove the power board and replace it with the replacement board. (Fuses are fitted on the replacement board)

Model 42V

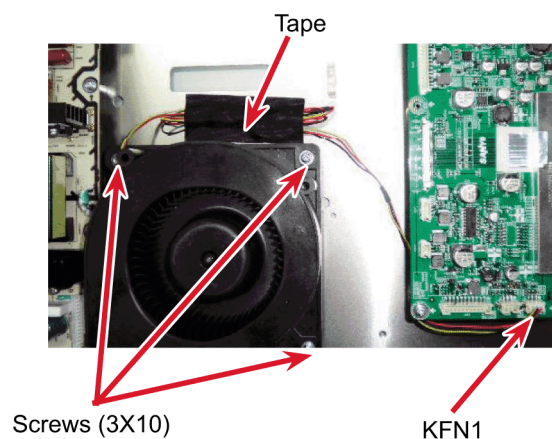


Model 47V



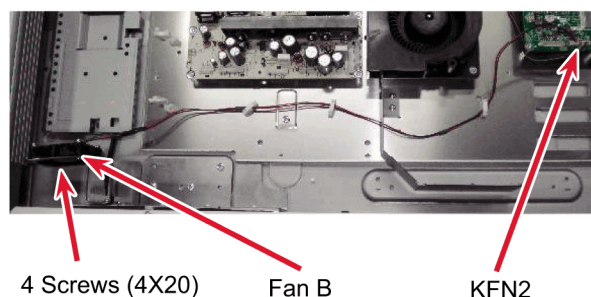
8.8. How to replace Fan A

1. Detach the coupler KFN1 which is connected to the main board.
2. Remove the tape shown in the photo.
3. Remove 3 screws which hold the Fan A and gently detach the fan, then replace with the replacement fan. (SCR PAN+SW+W 3X10)



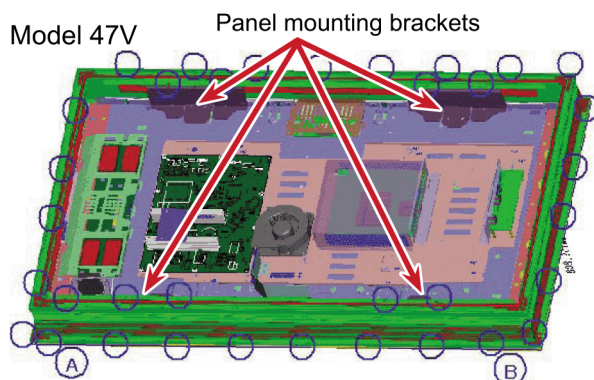
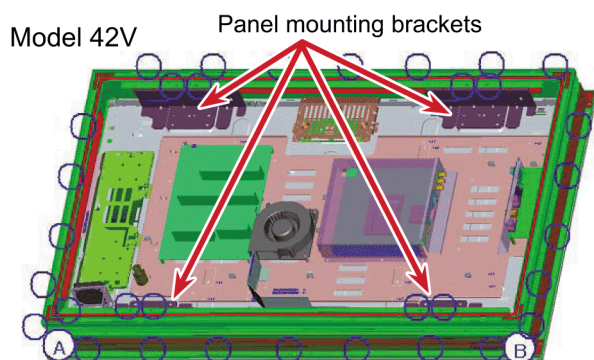
8.9. How to replace Fan B

1. Detach the coupler KFN2 which is connected to the main board.
2. Detach the cable off the cable hook.
3. Remove 4 screws which hold the Fan B and gently detach the fan, then replace with the replacement fan. (SCR PAN+SW+W 4X20)



8.10. Removing the cabinet back

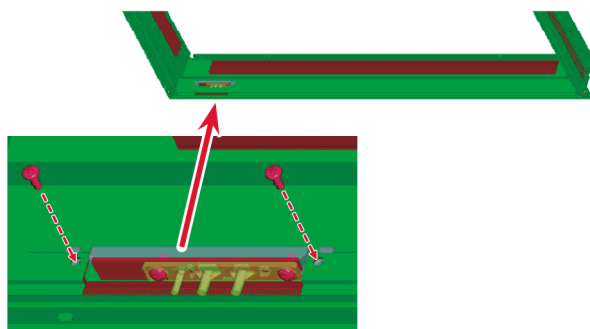
1. Detach the coupler K19H of the RC+LED board attached to the cabinet back.
2. Remove 9 screws which hold the panel mounting brackets and cabinet back together. (SPECIAL SCREW 4X12)
3. Remove the screws (Model 47V: 26; Model 42V: 24) which fasten the cabinet back to the cabinet front. (SPECIAL SCREW 4X12)
4. Gently lift up the cabinet back to release.
 - Marks A and B shown in the drawing are the points to be lined up when fitting the cabinet back.
 - The cabinet back is supplied as a complete unit of a frame. RC+LED board and dustproof and waterproof gaskets are NOT included.



8.11. Replacing the RC+LED board

1. Remove the cabinet back.
2. Undo the 2 screws to remove the RC+LED board together with the metal holder fitting. (SPECIAL SCREW 3X8)

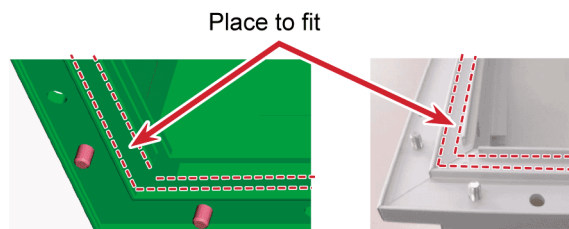
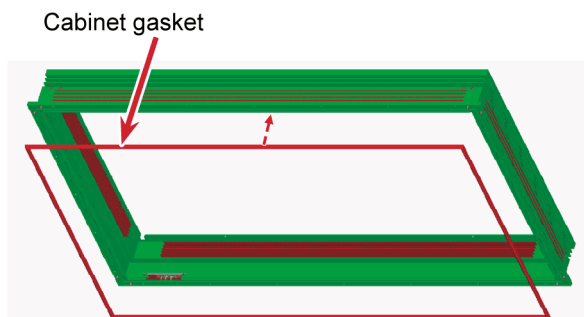
3. The replacement parts for the RC+LED board are supplied as a unit including the metal holder fitting. Replace it with the replacement ASSY RC+LED.

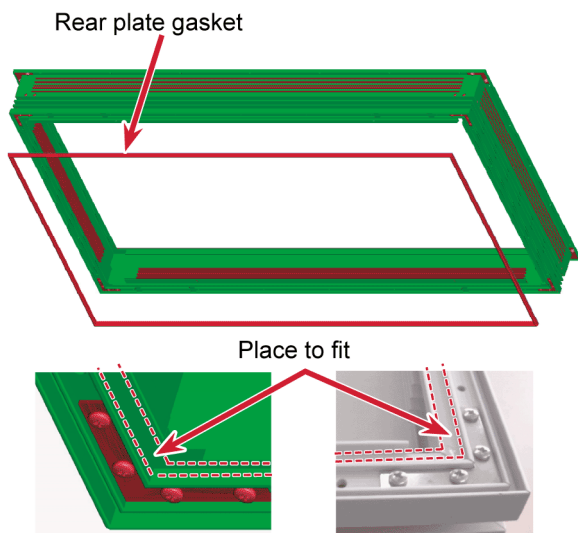


8.12. Replacing the gaskets

Precautions for replacement

- The gaskets shown in the drawing are important parts which must be installed between the cabinet front, cabinet back and back plate to keep the joints airtight to perform dustproof and waterproof function. They should be replaced every 3-4 years or if anything unusual is noticed during inspection or repair.
1. Remove the cabinet gasket from between the cabinet front and cabinet back, and replace it with the replacement gasket.
 2. Remove the rear plate gasket from between the cabinet back and back plate, and replace it with the replacement gasket.
- Ensure the gasket is fitted tightly into the groove in the cabinet back.



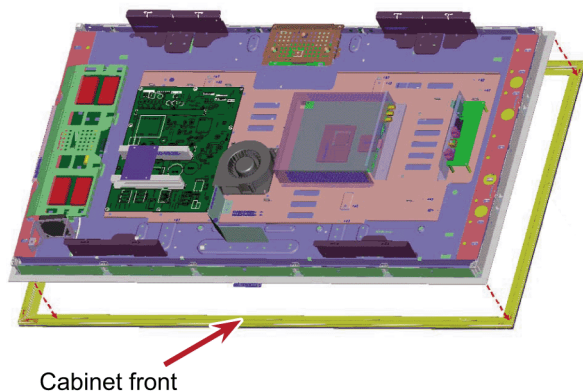


8.13. Removing the cabinet front

1. Remove the cabinet back.
2. Holding the panel mounting brackets, gently lift them up together with the LCD panel, then the cabinet front will be released.
 - The replacement cabinet front is supplied as a complete unit of a frame.

Precautions for removing and fitting the LCD panel

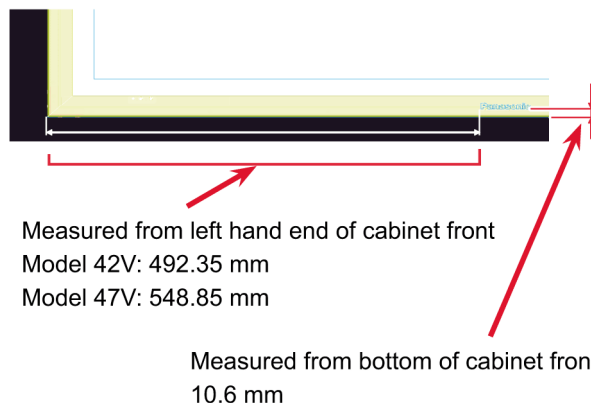
- The surface of the LCD panel is covered by an optical filter (glass). Therefore, the glass protrudes around the LCD panel. Please exercise adequate care in handling the product to avoid bumping or scratching the glass.



8.14. Replacing the Panasonic badge

- The Panasonic badge is attached on the replacement cabinet front, but the Panasonic badge itself can be also supplied as a single part. Take the following steps to replace the badge
 1. Detach the Panasonic badge.

2. Attach the replacement Panasonic badge to the specified position on the cabinet front as shown in the drawing.

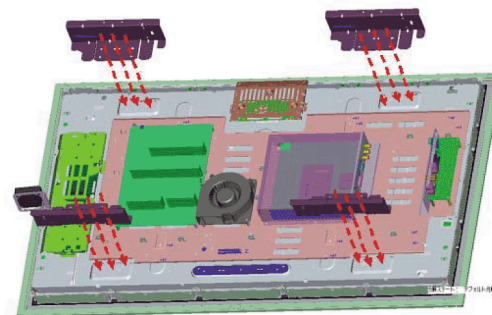


8.15. Replacing the LCD panel

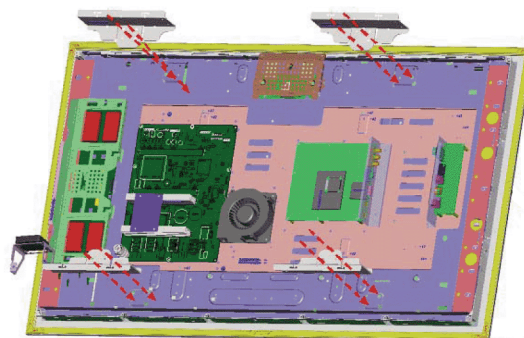
Carry out the following steps to remove the parts attached to the LCD panel.

1. Remove the cabinet back.
2. Remove the cabinet front.
3. Undo the screws (Model 47V: 8; Model 42: 12) and remove the panel mounting brackets. (SCR BIN 4X6)

Model 42V

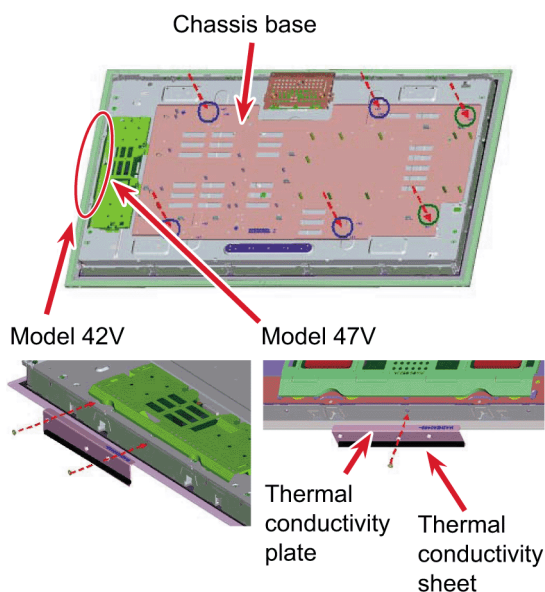


Model 47V



4. Undo 6 screws to remove the chassis base. (SCR BIN 4X6: 4 screws; SCR PAN+SW+W 3X6: 2 screws)

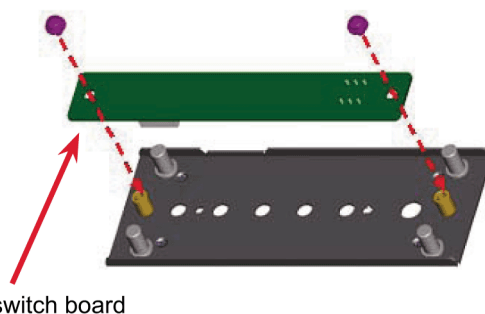
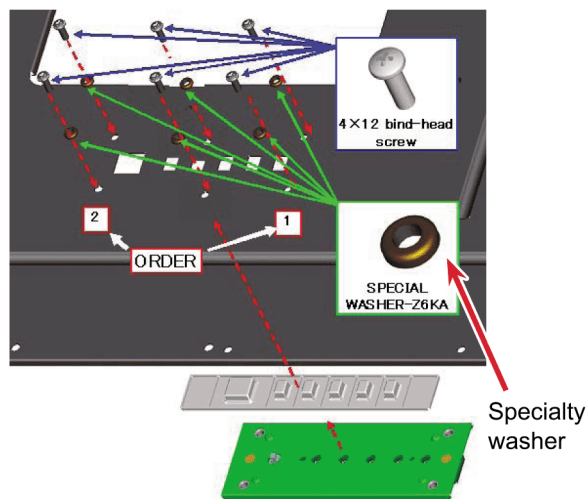
5. Undo the screws (Model 47V: 1; Model 42V: 2), then remove the thermal conductivity plate from the side of the LCD panel. (SCR FLT 4X6)



- Thermal conductivity sheets are attached to the front and back sides of the thermal conductivity plate.
6. Remove the LVDS cable and inverter cable from the LCD panel.
7. Replace it with the replacement LCD panel.

8.16. Replacing the main switch board

1. Undo the 6 screws to take off the control button and main switch board together with the metal holder fitting from the back plate. (SPECIAL SCREW 4X12)
2. Undo the 2 screws to remove the main switch board from the metal holder fitting. (SCR PAN+SW+W 3X10)

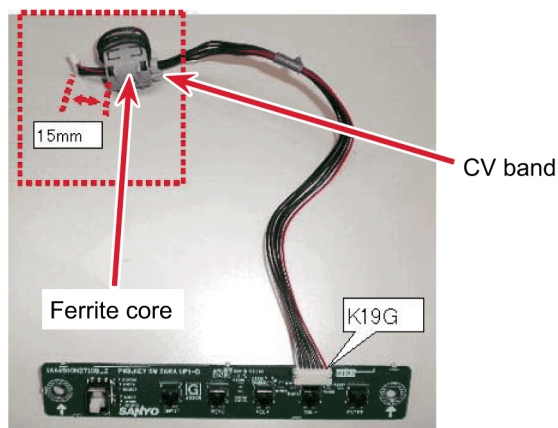


Precautions for removing and fitting the main switch board.

- 6 specialty washers for ensuring dustproof and waterproof performance are fitted on 6 screws. When fitting the main switch board, always put the 6 specialty washers on screws facing the correct direction (rubber side is facing to the back plate).

8.17. Fitting the core for the main switch board cable

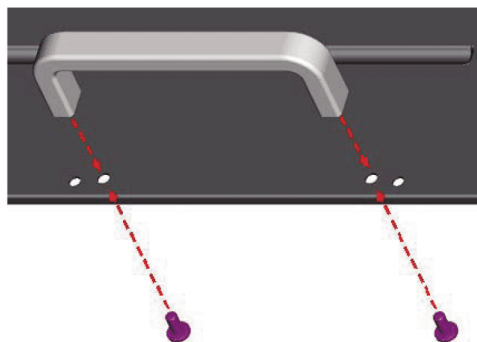
When replacing the main switch board cable, place the ferrite core 15 mm from the coupler K39G on the main board and wind the cable once on to it and secure it with CV band.



8.18. Removing the handles

Take the following steps to change the handles when replacing the back plate, etc.

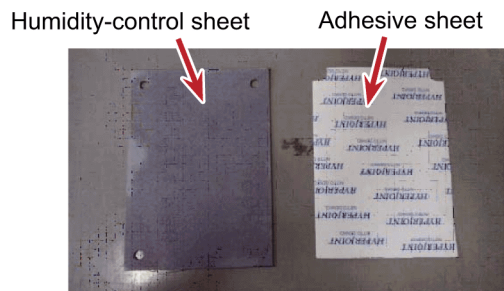
1. Undo the 8 screws to remove the 4 handles from the back plate. (SPECIAL SCREW 5X10)
2. Fix the handles onto the replacement back plate.



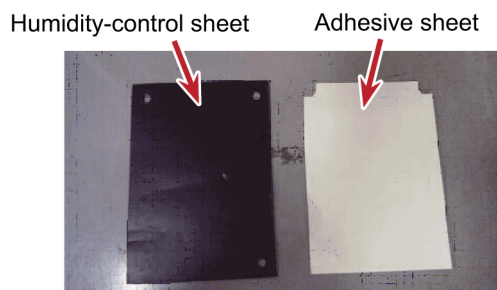
8.19. Replacing humidity-control sheet

The humidity-control sheet is placed inside the back plate to control internal humidity. Ensure that the humidity-control sheet is replaced if the back plate is removed or renewed.

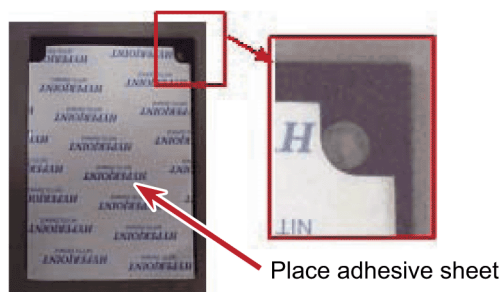
1. Detach the humidity-control sheet from inside the back plate.
2. The replacement humidity-control sheet comes with an adhesive sheet. Put adhesive sheet on the back (black side) of the humidity-control sheet.



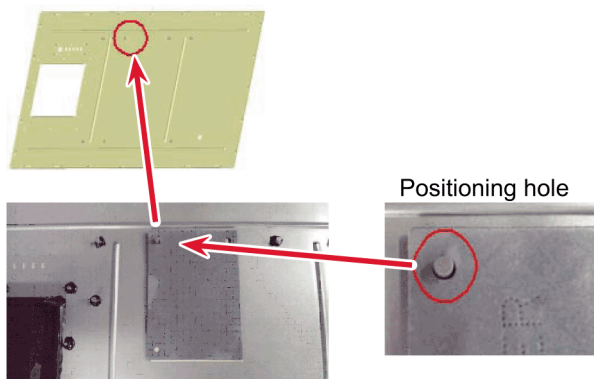
(Front)



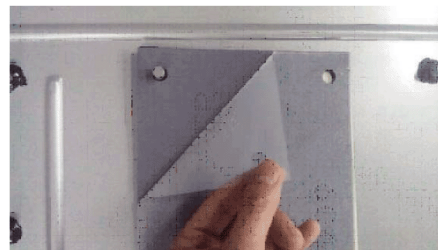
(Back)



3. Peel the seal off the adhesive sheet and place the humidity-control sheet on the position shown in the drawing.



4. The humidity-control function begins when the surface sheet is peeled off the humidity-control sheet.



Precautions for replacement of the humidity-control sheet

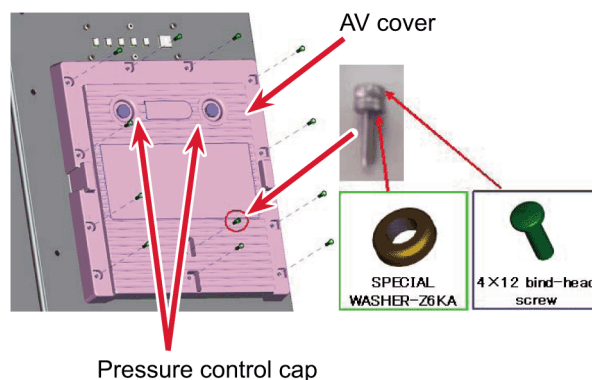
- Do not carry out the humidity-control sheet replacement anywhere that the humidity level is extremely high, such as a bath room, etc.

8.20. Replacing the AV cover

1. Undo the 12 screws to remove the AV cover from the back plate. (SPECIAL SCREW 4X12)
2. Replace it with the replacement AV cover.

Precautions for removing and fitting the AV cover

- A specialty washer is fitted in one place on the AV cover to ensure dustproof and waterproof performance. When fitting the AV cover, always put the specialty washer on the screw facing the correct direction (rubber side is facing to the AV cover).
- When removing the AV cover, undo all 12 screws of the order bottom, middle and top to prevent the AV cover from slipping off. Beware of opening the AV cover with any screws left on as this will damage the AV cover.
- The replacement AV cover is a unit part including pressure control cap, warning label, gel for wire outlet.

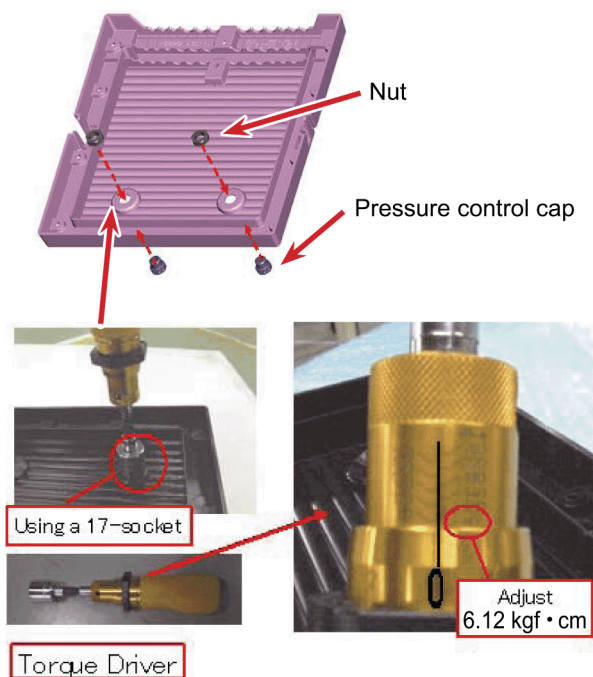


8.21. Replacing the pressure control cap

- The pressure control caps are included in the AV cover as a spare parts, but the pressure control cap itself can be also supplied as a single part. Take the following steps to replace the pressure control cap.

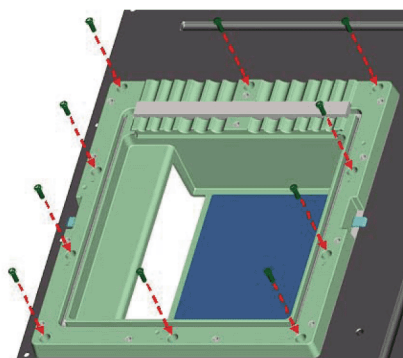
1. Remove the AV cover from the back plate.
2. Use fingers to hold the pressure control cap down from the outside of the AV cover, and turn the nut located inside the AV cover using a box wrench or similar to undo the nut.
3. Fit the replacement pressure control cap from the outside of the AV cover and hold it with fingers.

- Place the nut inside the AV cover and turn it using a torque screwdriver (a special-purpose tool) to tighten it.
(Size: 17mm, Torque screwdriver setting: 6.12 kgf • cm)



8.22. Replacing the AV cover (bottom)

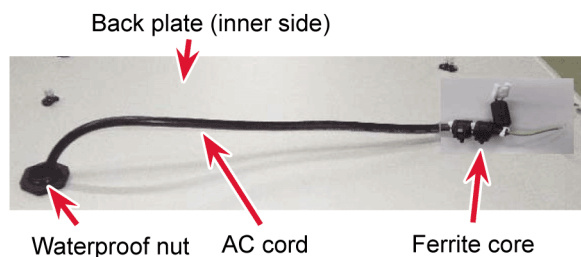
- Undo the 10 screws to remove the AV cover (bottom) from the back plate. (SPECIAL SCREW 4X12)
- Replace it with the replacement AV cover (bottom).



- The replacement AV cover (bottom) is a unit part including gasket and gel for wire outlet.

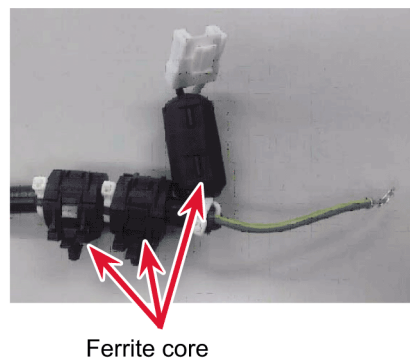
8.23. Replacing the power cord

- When replacing the power cord, the power cord has to be detached from the back plate.

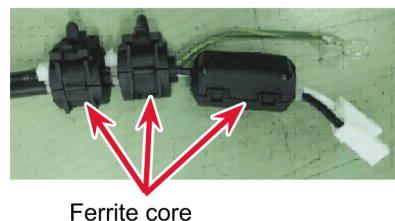


- Remove 3 ferrite cores which are fitted on the power board side of the power cord. Take care not to damage the power cord when cutting CV band with nippers, etc.

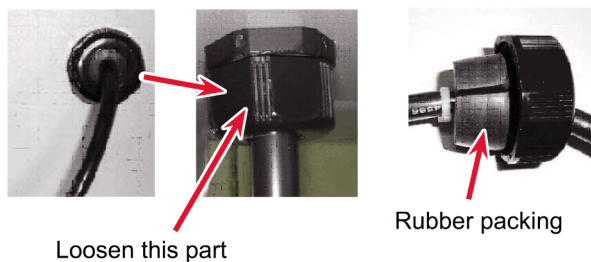
Model 42V



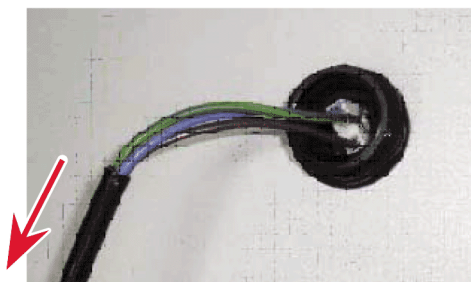
Model 47V



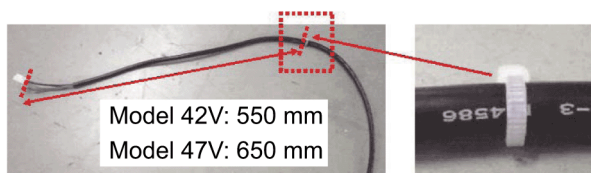
- Turn to loosen the waterproof nut which secures the power cord onto the back plate and remove the nut.
- Open the slit of the rubber packing which is located inside the waterproof nut to remove the rubber packing from the power cord.



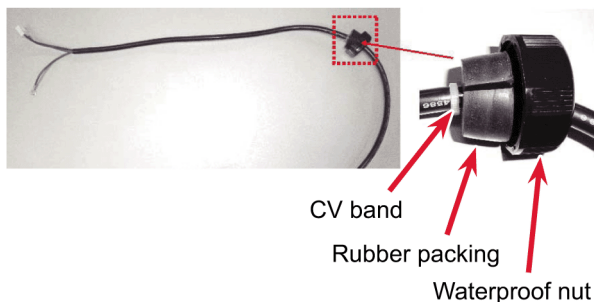
- Pull the power cord out of the hole in waterproof nut.



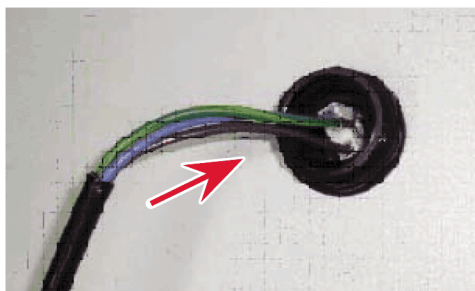
- Fit the CV band in the following position on the replacement power cord (measured from the connector on the power board side).



6. Fit the waterproof nut (outer side) and rubber packing on to the power cord in the position shown in the diagram.



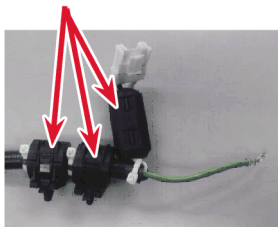
7. Put the power-board-side connector of the power cord through the hole in the waterproof nut on the back plate.



8. Fit 3 CV bands and 3 ferrite cores on the power-board-side connector part of the power cord.

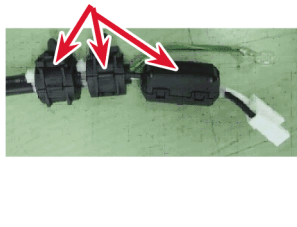
Model 42V

Ferrite core



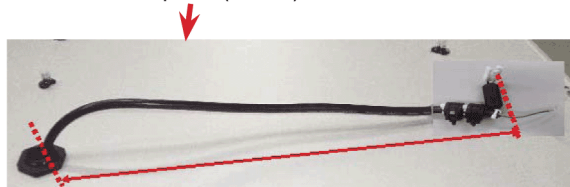
Model 47V

Ferrite core



9. Pull the power cord into the back plate as much as possible (until it is stopped by the CV band fitted on AC cord). The length will be as follows.

Back plate (inside)

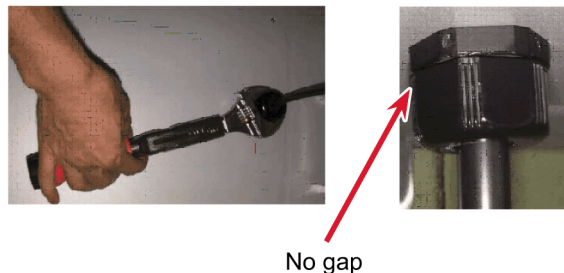


Model 42V: 530 mm

Model 47V: 630 mm

10. In the reverse order to disassembly, fit the power cord onto the power board and close the back plate.
11. Tighten the waterproof nut (outside) using a torque wrench to fit the power cord onto the back plate. (size: 36.2mm, Tightening torque: 50 kgf • cm)

- Ensure that there is no gap between waterproof nuts in this procedure.



8.24. Replacing the waterproof nuts

Take the following steps when replacing the waterproof nuts on the back plate side.

1. Hold the inner side of the main part of waterproof nut set using monkey wrench, etc.
 2. Undo the outer side of the waterproof nut using monkey wrench, etc, and remove it
 3. Hold the inner side of the main part of replacement waterproof nut set using monkey wrench, etc.
 4. Tighten the replacement waterproof nut (outer side) using a torque wrench. Fix it onto the back plate. (size: 36.2mm, Tightening torque: 50 kgf • cm)
- The replacement waterproof nut comes as a set of 3 nuts and rubber packings.

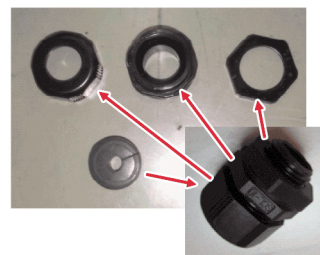
Inside



Outside

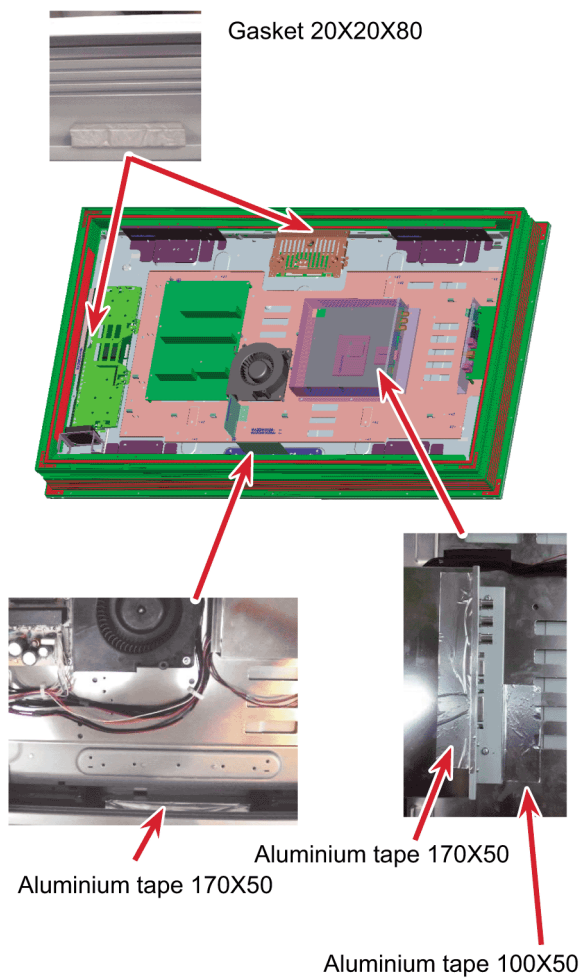


Replacement waterproof nut

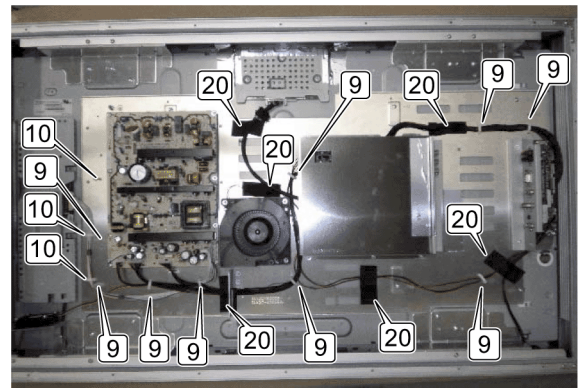


8.25. Replacing the aluminium tape and gaskets

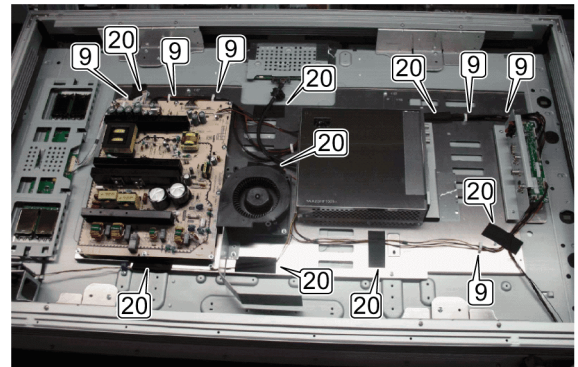
The aluminium tape and gaskets are fitted in the following positions of this unit. When replacing any parts around them, stick the replacement aluminium tape and gasket together before putting them in place.



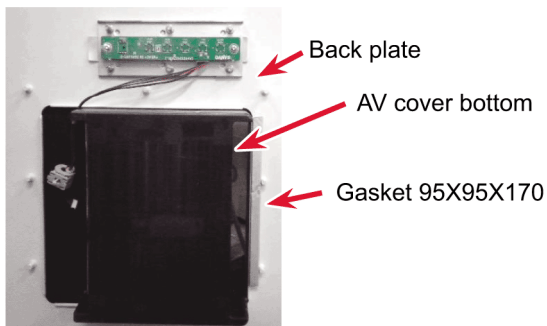
Model 42V



Model 47V



Model 47V only



8.26. Hook and tape for the cables

The position of hooks and tape to arrange the cables are as shown in the following drawing.

9, 10: Hook

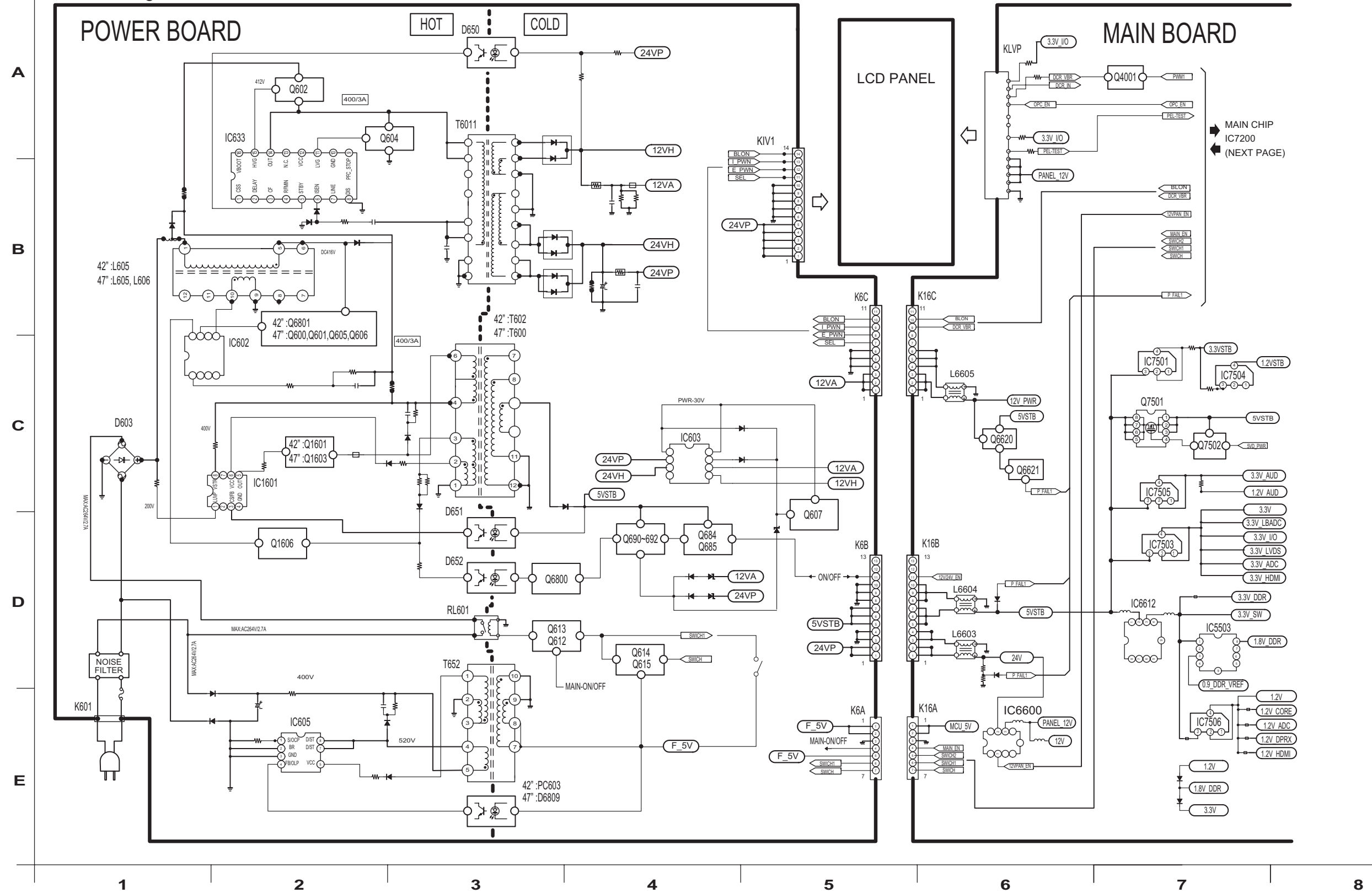
20: Tape

(The number represents the number of the detail drawing and parts list.)

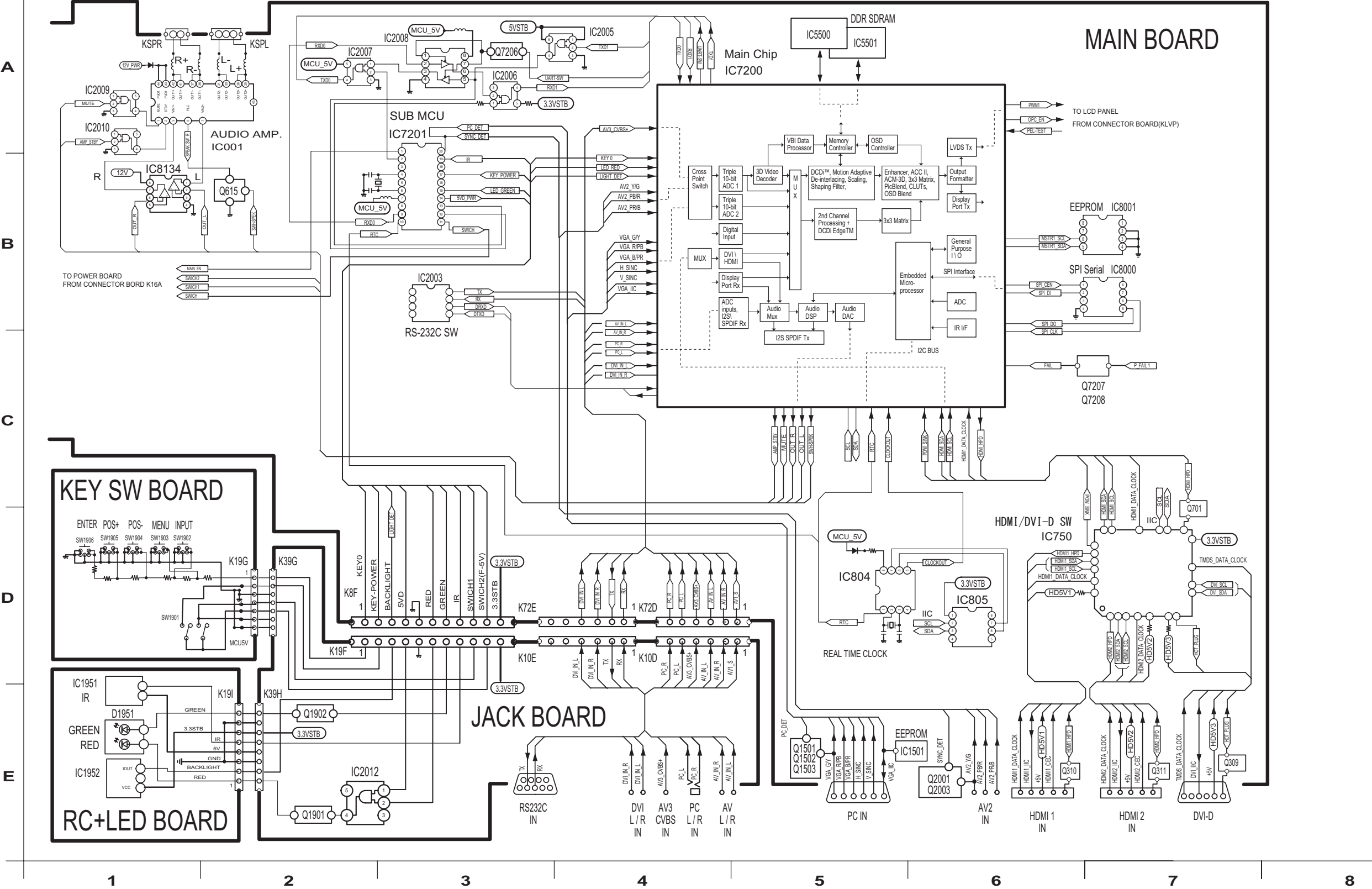
9 Block Diagram

TH-42LFP30 / TH-47LFP30

Block Diagram 1/2

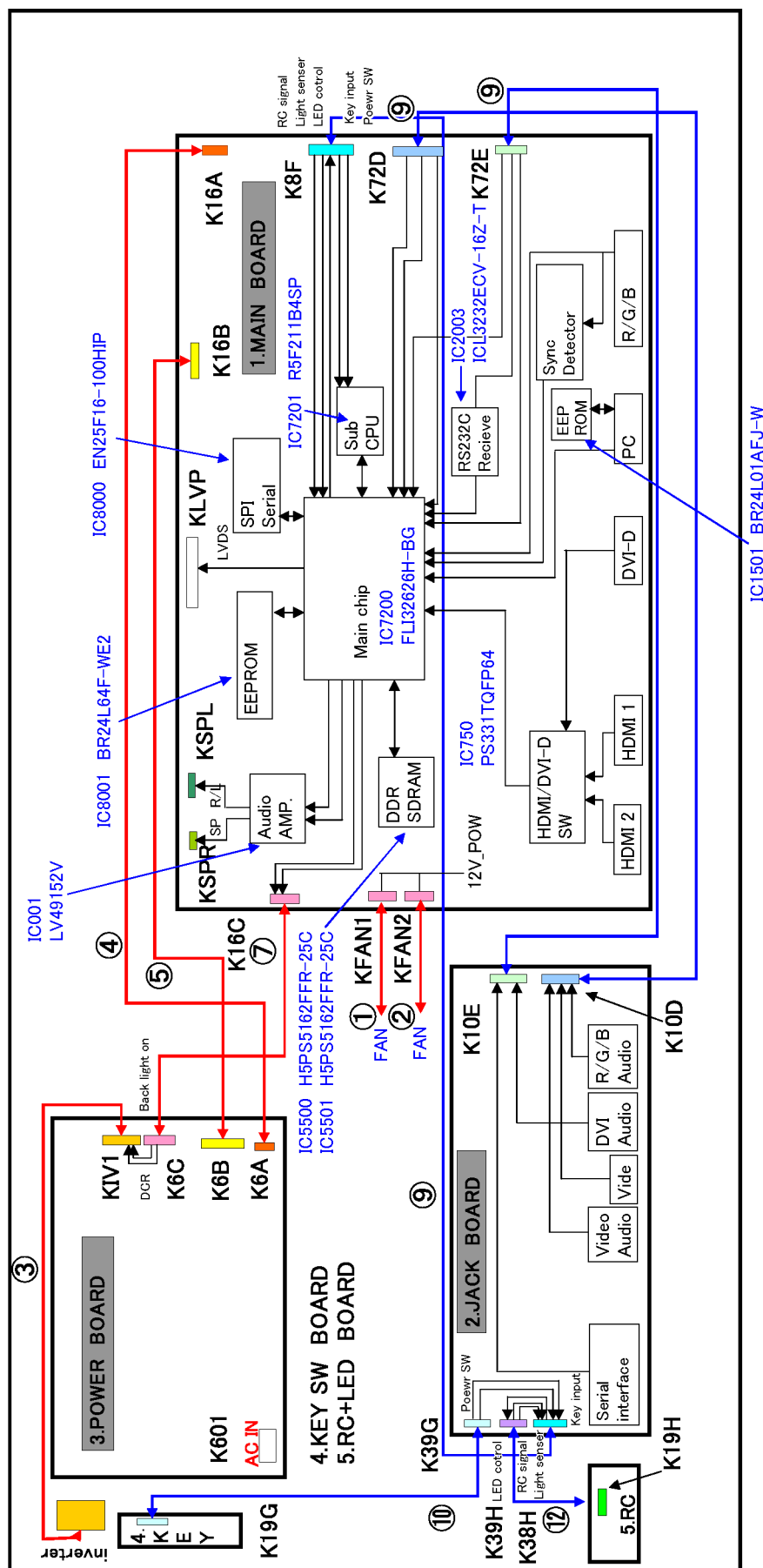


TH-42LFP30 / TH-47LFP30
Block Diagram 2/2



10 Wiring Connection Diagram

10.1. Wiring Connection Diagram (1)



POWER K1V1 ~INVERTER

③2.0mm pitch	
PIN1	24VP
PIN2	24VP
PIN3	24VP
PIN4	24VP
PIN5	24VP
PIN6	GND
PIN7	GND
PIN8	GND
PIN9	GND
PIN10	GND
PIN11	SEL
PIN12	(NC)
PIN13	DCR_VBR
PIN14	BL_ON

POWER K6C ~MAIN K16C

⑦2.0mm pitch	
PIN1	12V_PWR
PIN2	12V_PWR
PIN3	12V_PWR
PIN4	GND
PIN5	GND
PIN6	GND
PIN7	SEL
PIN8	(NC)
PIN9	DCR_VBR
PIN10	BL_ON
PIN11	(NC)

POWER K6B ~MAIN K16B

⑤2.0mm pitch	
PIN1	24V
PIN2	24V
PIN3	GND
PIN4	GND
PIN5	5VSTB
PIN6	5VSTB
PIN7	5VSTB
PIN8	GND
PIN9	GND
PIN10	GND
PIN11	12V/24V_EN
PIN12	GND
PIN13	GND

POWER K6A ~MAIN K16A

④2.0mm pitch	
PIN1	MCU_5V
PIN2	MCU_5V
PIN3	GND
PIN4	MAIN_EN
PIN5	MCU_5V
PIN6	SWITCH1
PIN7	SWITCH

JACK K10D ~MAIN K72D

⑨1.5mm pitch	
PIN1	AV1_S
PIN2	GND
PIN3	AV_IN_R(audio)
PIN4	GND
PIN5	AV_IN_L(audio)
PIN6	GND
PIN7	AV_CVBS
PIN8	GND
PIN9	PC_IN_L(audio)
PIN10	GND
PIN11	PC_IN_R(audio)
PIN12	GND

JACK K10E ~MAIN K72E

⑨1.5mm pitch	
PIN1	RX
PIN2	TX
PIN3	GND
PIN4	DVI_IN_R(audio)
PIN5	GND
PIN6	DVI_IN_L(audio)
PIN7	GND
PIN8	AV1_Y
PIN9	GND
PIN10	AV1_C

JACK K19F ~MAIN K8F

⑨1.5mm pitch	
PIN1	KEY0
PIN2	KEY_POWER
PIN3	LIGHT_DET
PIN4	5VD
PIN5	GND
PIN6	LED_RED
PIN7	LED_GREEN
PIN8	IR
PIN9	SWITCH1
PIN10	MCU_5V

KEY SW K19G ~JACK K39G

⑩1.5mm pitch	
PIN1	KEY0
PIN2	KEY_POWER
PIN3	GND
PIN4	SWITCH1
PIN5	MCU_5V
PIN6	SWITCH1
PIN7	GND

JACK K39H ~ ~RC+LED K19H

⑫1.5mm pitch	
PIN1	LED_R
PIN2	LIGHT_DET
PIN3	GND
PIN4	SWITCH1
PIN5	IR
PIN6	3.3VSTB
PIN7	GND
PIN8	LED_G

MAIN KSPP ~SPEAKER-R

③2.0mm pitch	
PIN1	SP_R+
PIN2	SP_R-

MAIN KSPL ~SPEAKER-L

③2.0mm pitch	
PIN1	SP_L-
PIN2	(NC)
PIN3	SP_L+

KFN1 ~FAN1

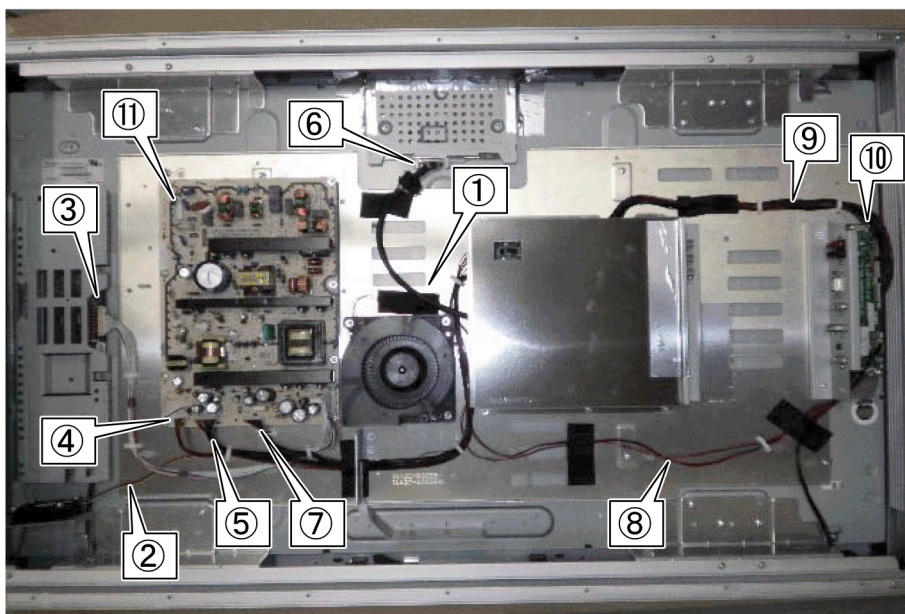
①2.0mm pitch	
PIN1	12V_POW
PIN2	GND
PIN3	FAN_LOCK

KFN2 ~FAN2

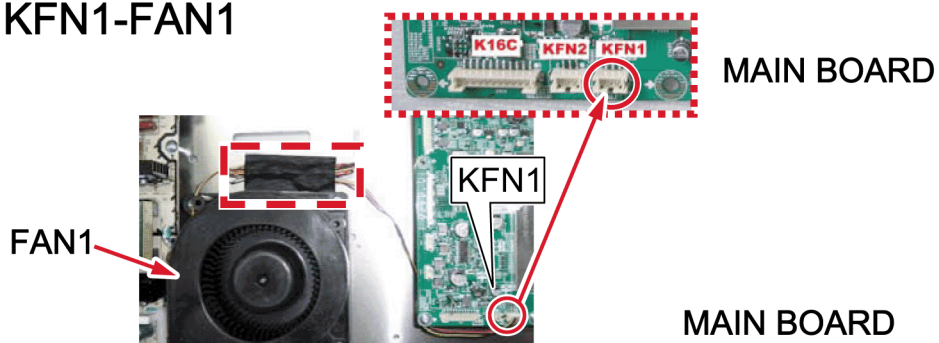
②2.0mm pitch	
PIN1	12V_POW
PIN2	GND
PIN3	FAN_LOCK

10.2. Wiring Connection Diagram (2) (42 inch)

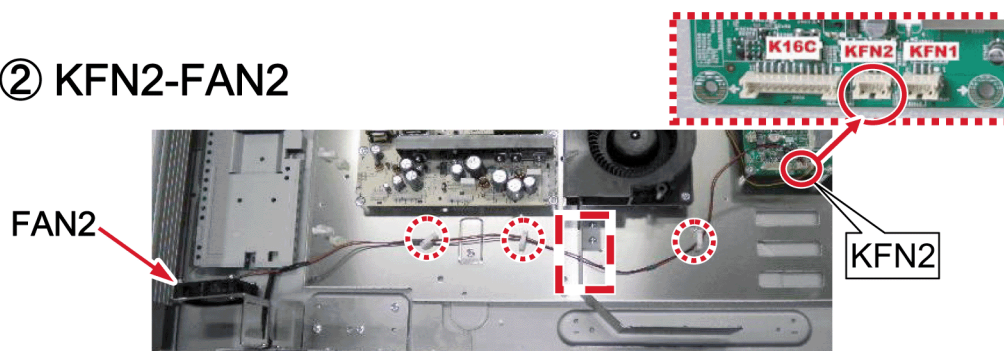
(42 inch)



① KFN1-FAN1

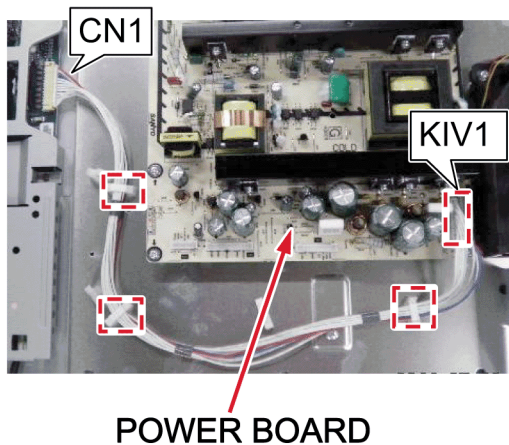


② KFN2-FAN2

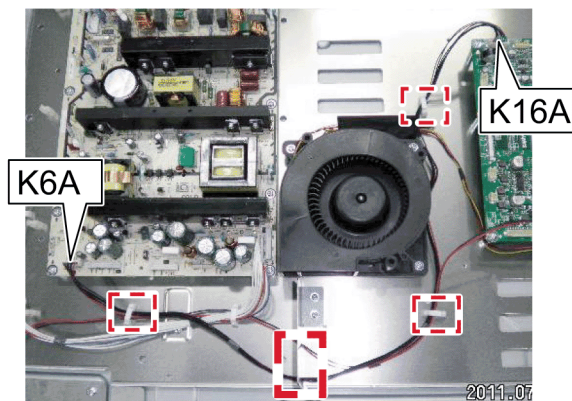


10.3. Wiring Connection Diagram (3) (42 inch)

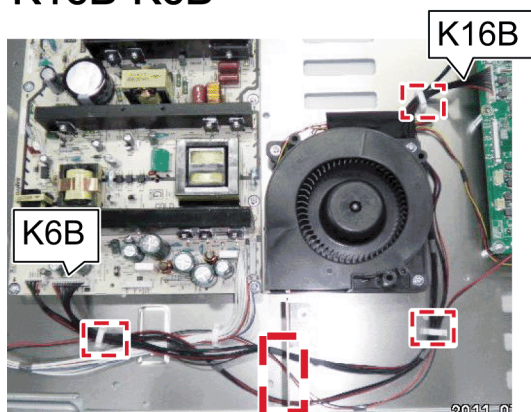
③ KIV1-CN1(PANEL)



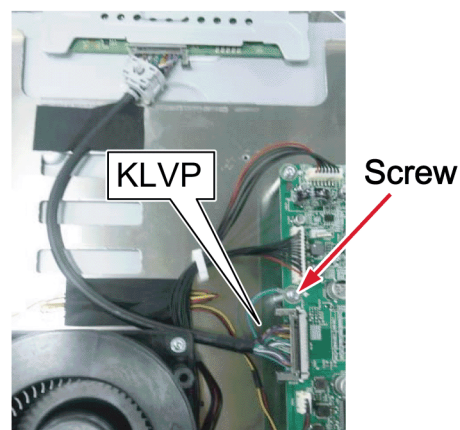
④ K16A-K6A



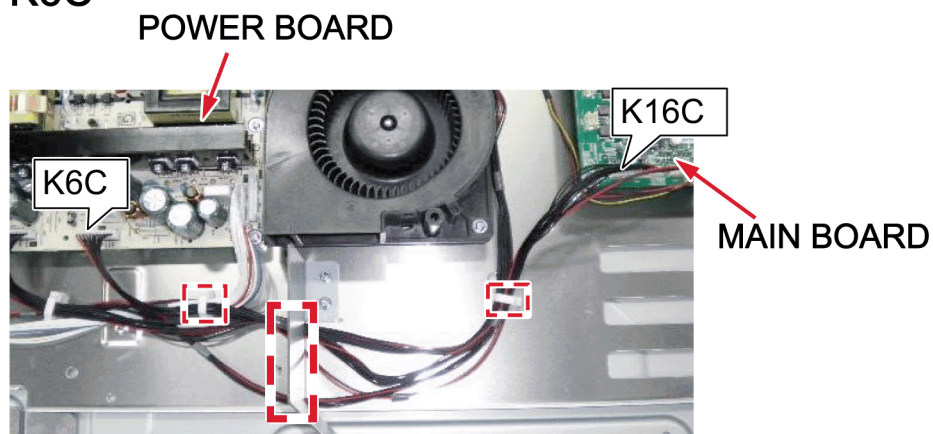
⑤ K16B-K6B



⑥ KLVP-PANEL(LVDS)

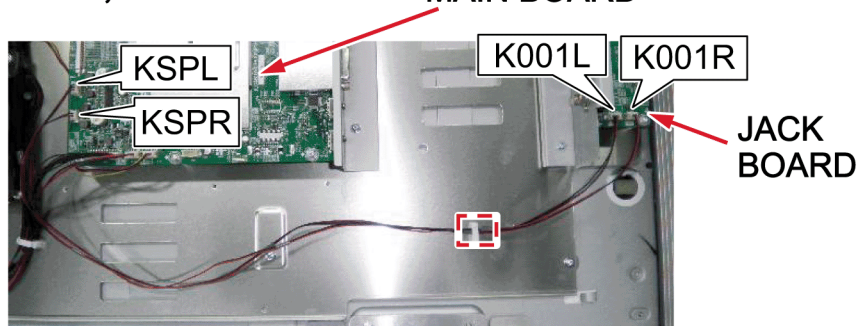


⑦ K16C-K6C

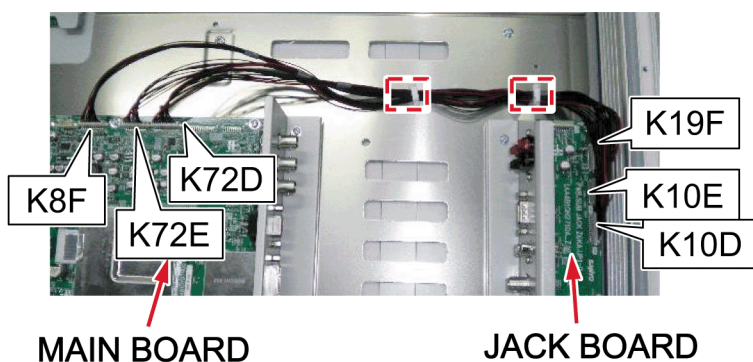


10.4. Wiring Connection Diagram (4) (42 inch)

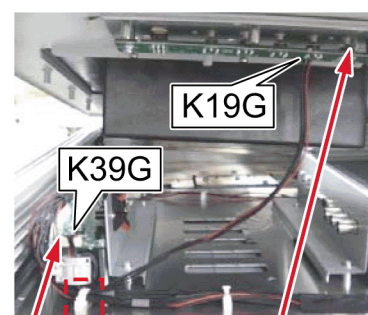
⑧ KSPL-K001L, KSPR-K001R MAIN BOARD



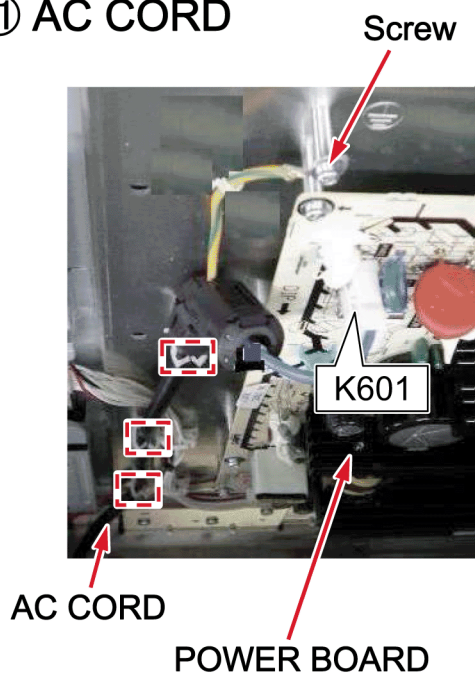
⑨ MAIN BOARD - JACK BOARD



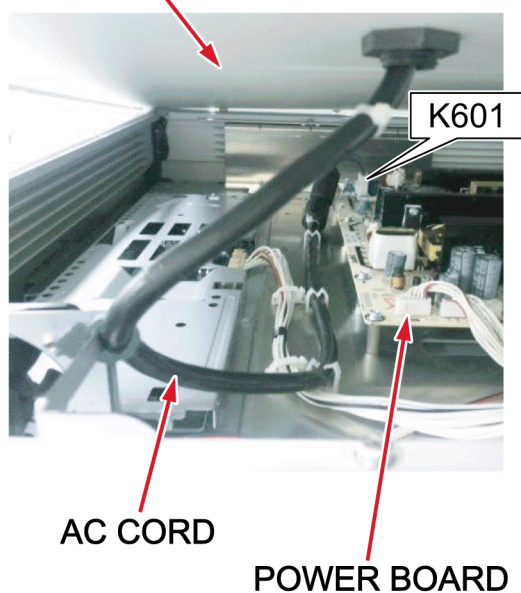
⑩ K19G - K39G



⑪ AC CORD

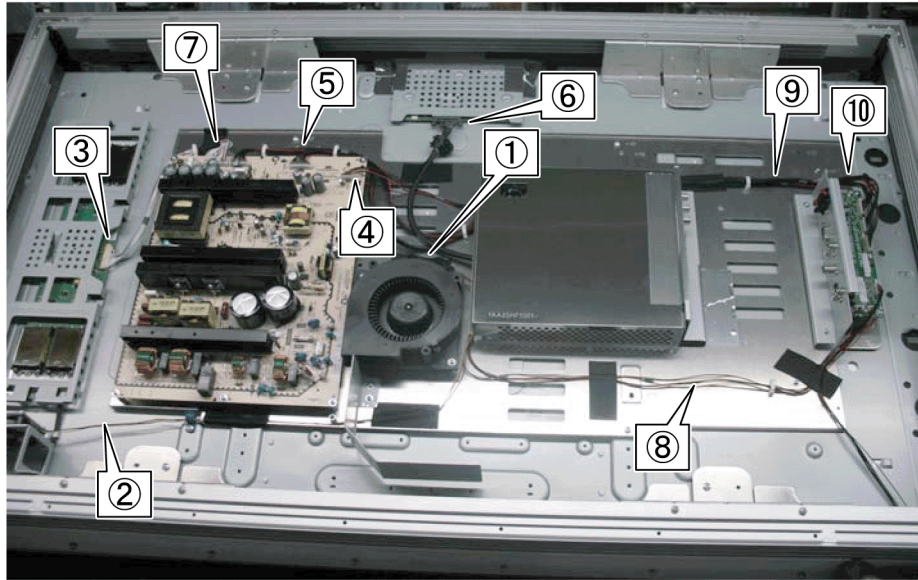


REAR PLATE

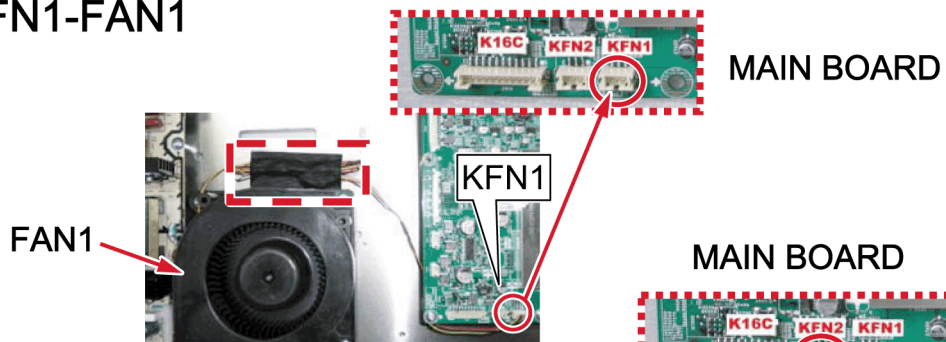


10.5. Wiring Connection Diagram (5) (47 inch)

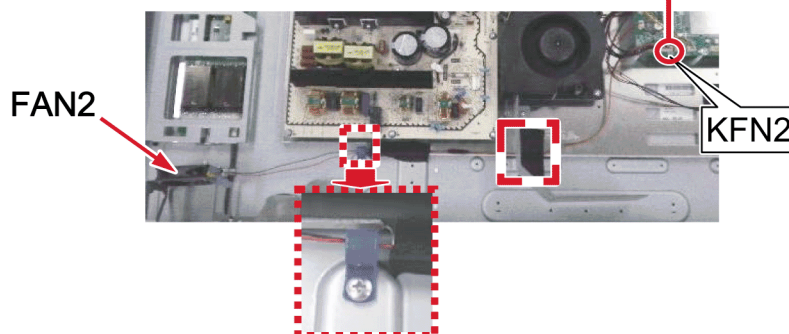
(47 inch)



① KFN1-FAN1

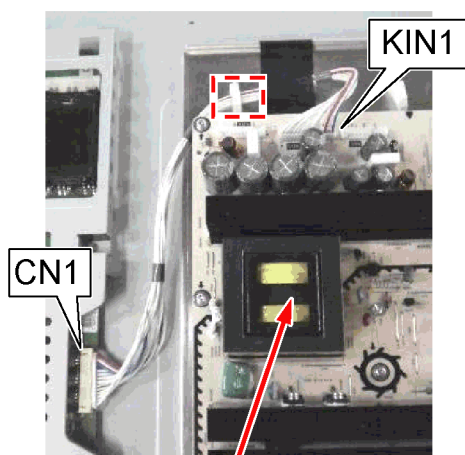


② KFN2-FAN2



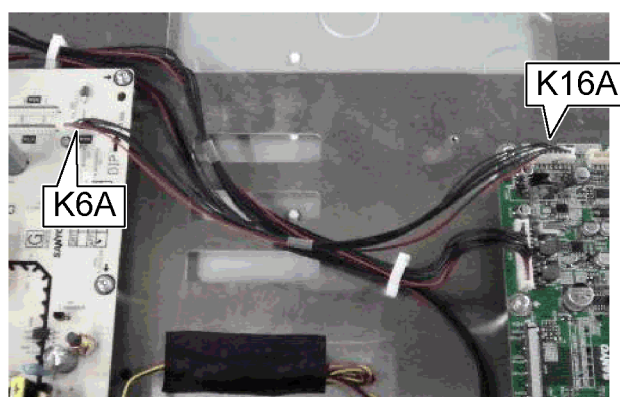
10.6. Wiring Connection Diagram (6) (47 inch)

③ KIV1-CN1(PANEL)

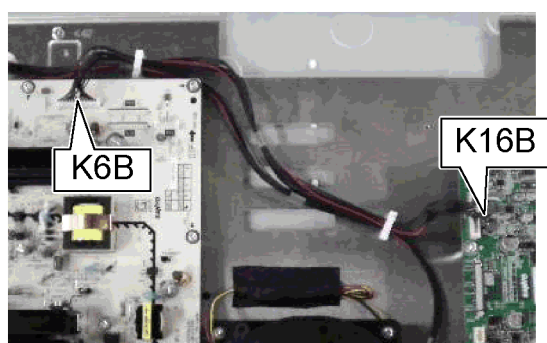


POWER BOARD

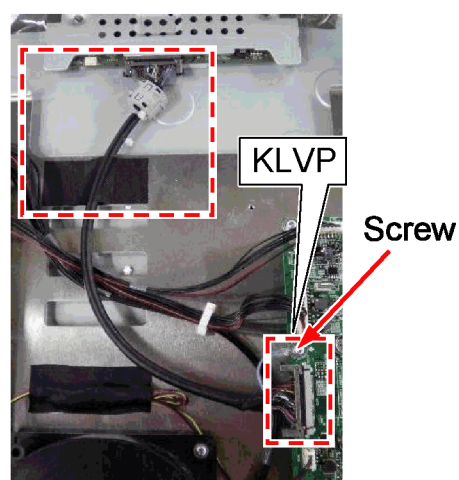
④ K16A-K6A



⑤ K16B-K6B

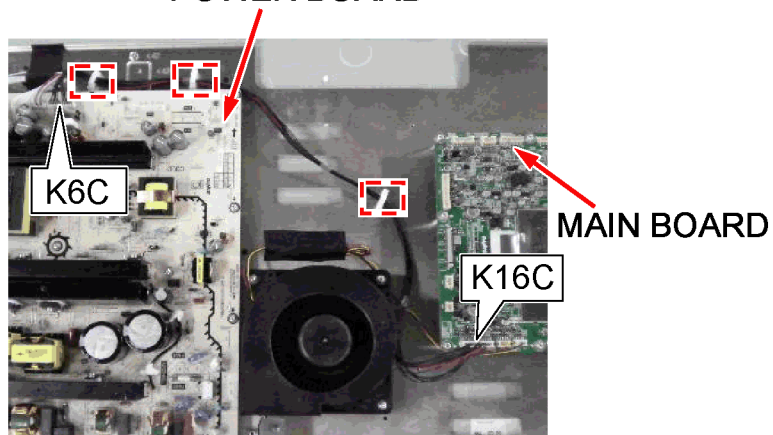


⑥ KLVP-PANEL(LVDS)



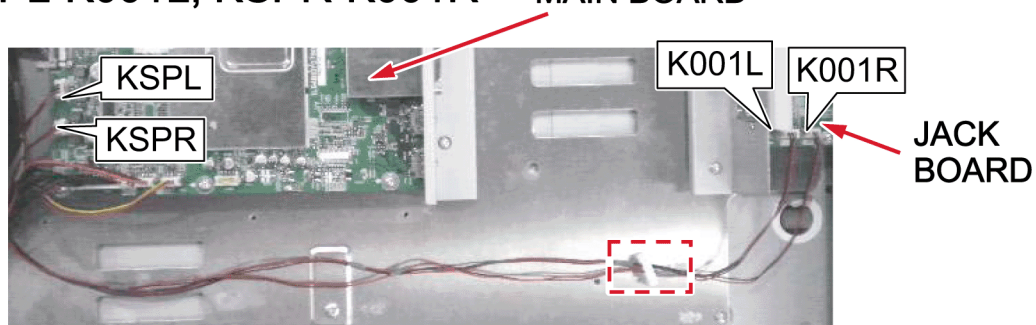
⑦ K16C-K6C

POWER BOARD

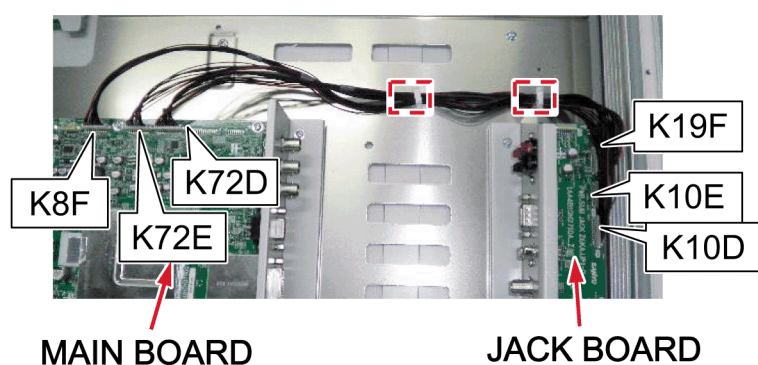


10.7. Wiring Connection Diagram (7) (47 inch)

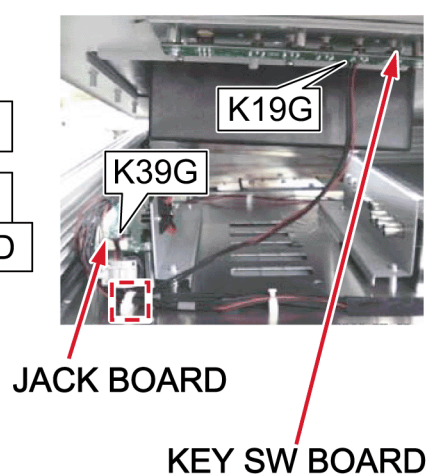
⑧ KSPL-K001L, KSPR-K001R MAIN BOARD



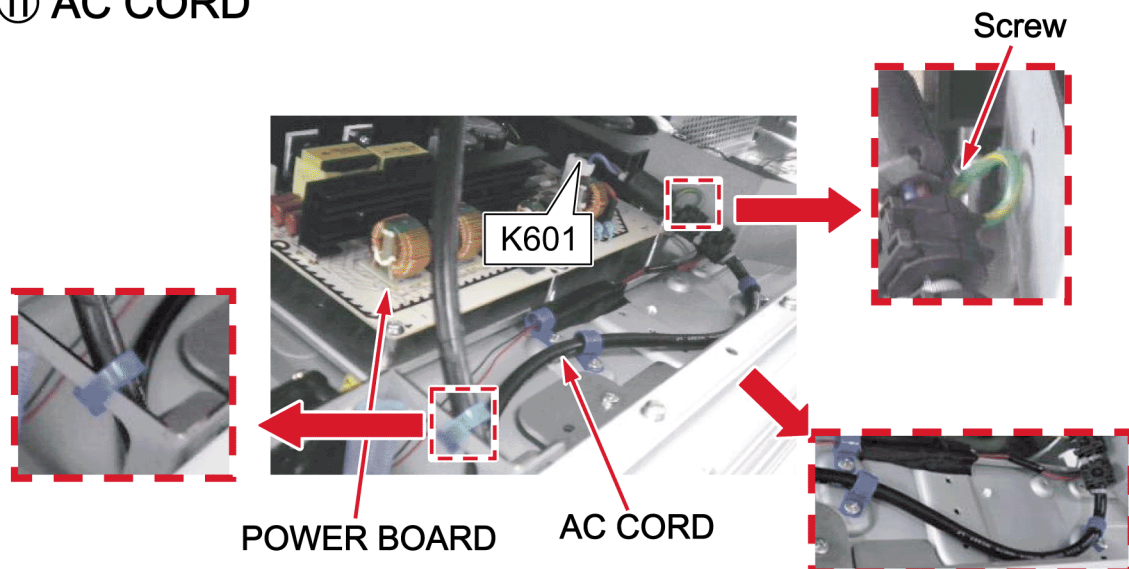
⑨ MAIN BOARD - JACK BOARD



⑩ K19G - K39G



⑪ AC CORD

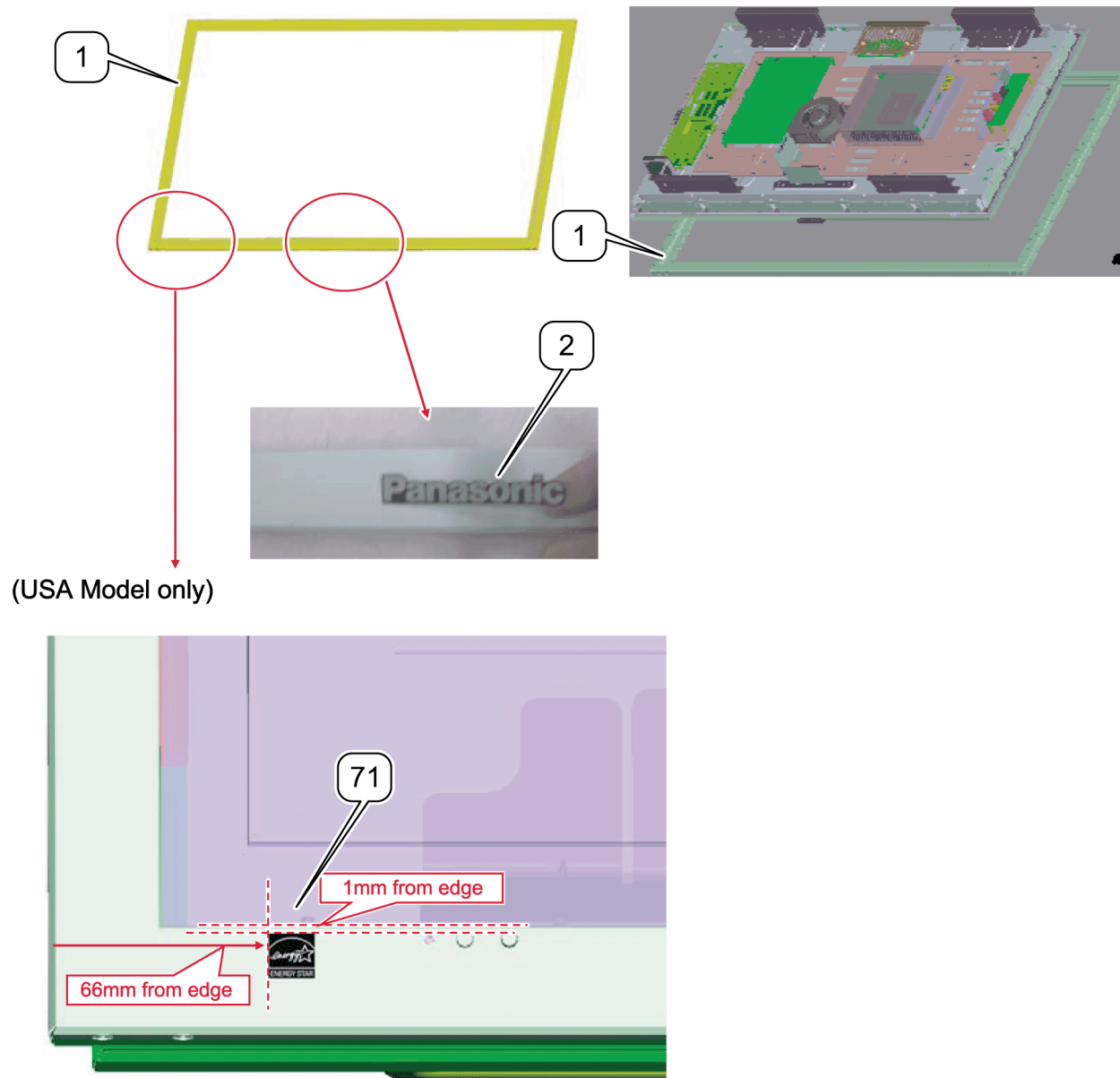


11 Exploded View and Replacement Parts List

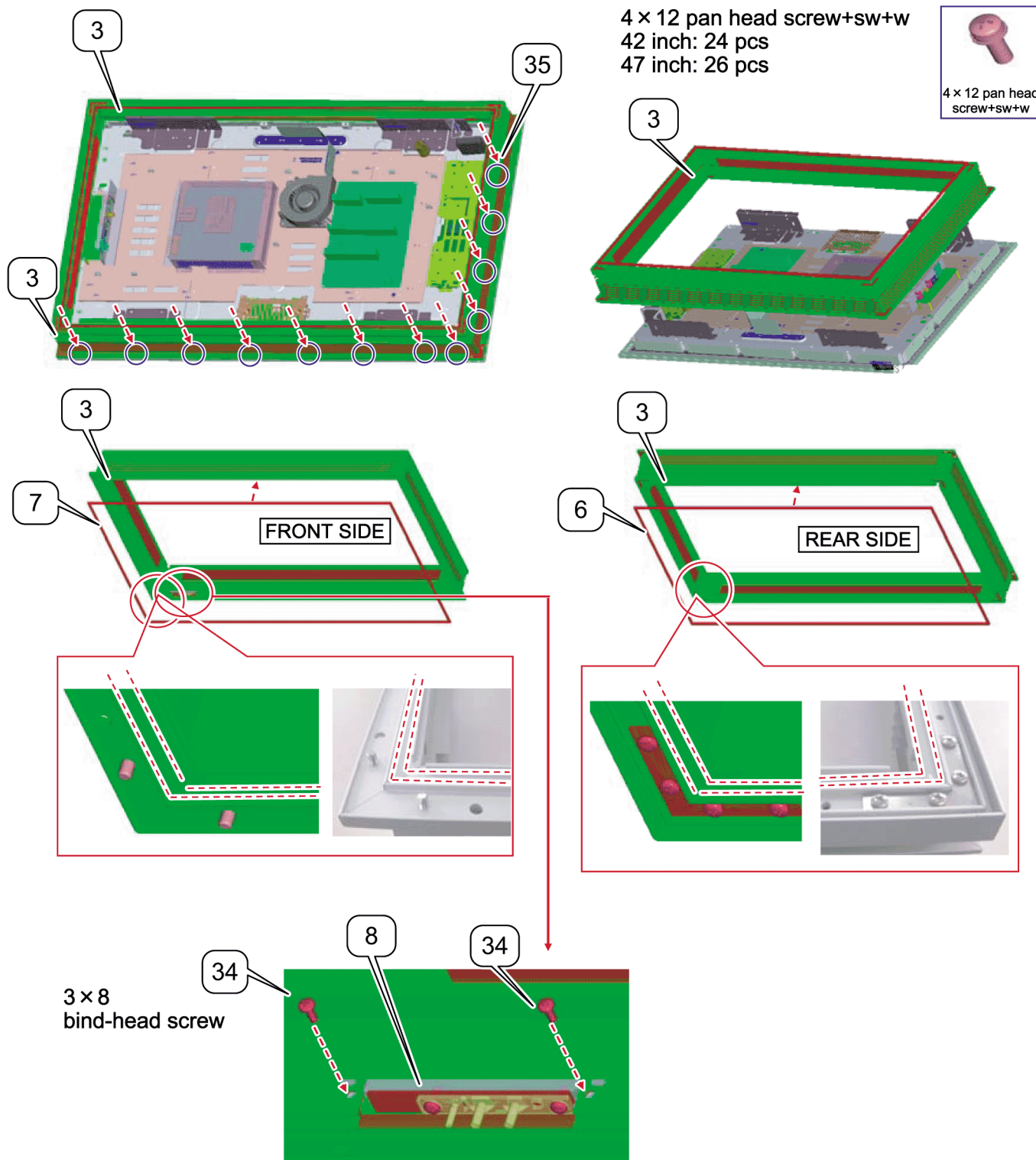
11.1. Exploded View and Mechanical Replacement Parts List

11.1.1. Exploded View

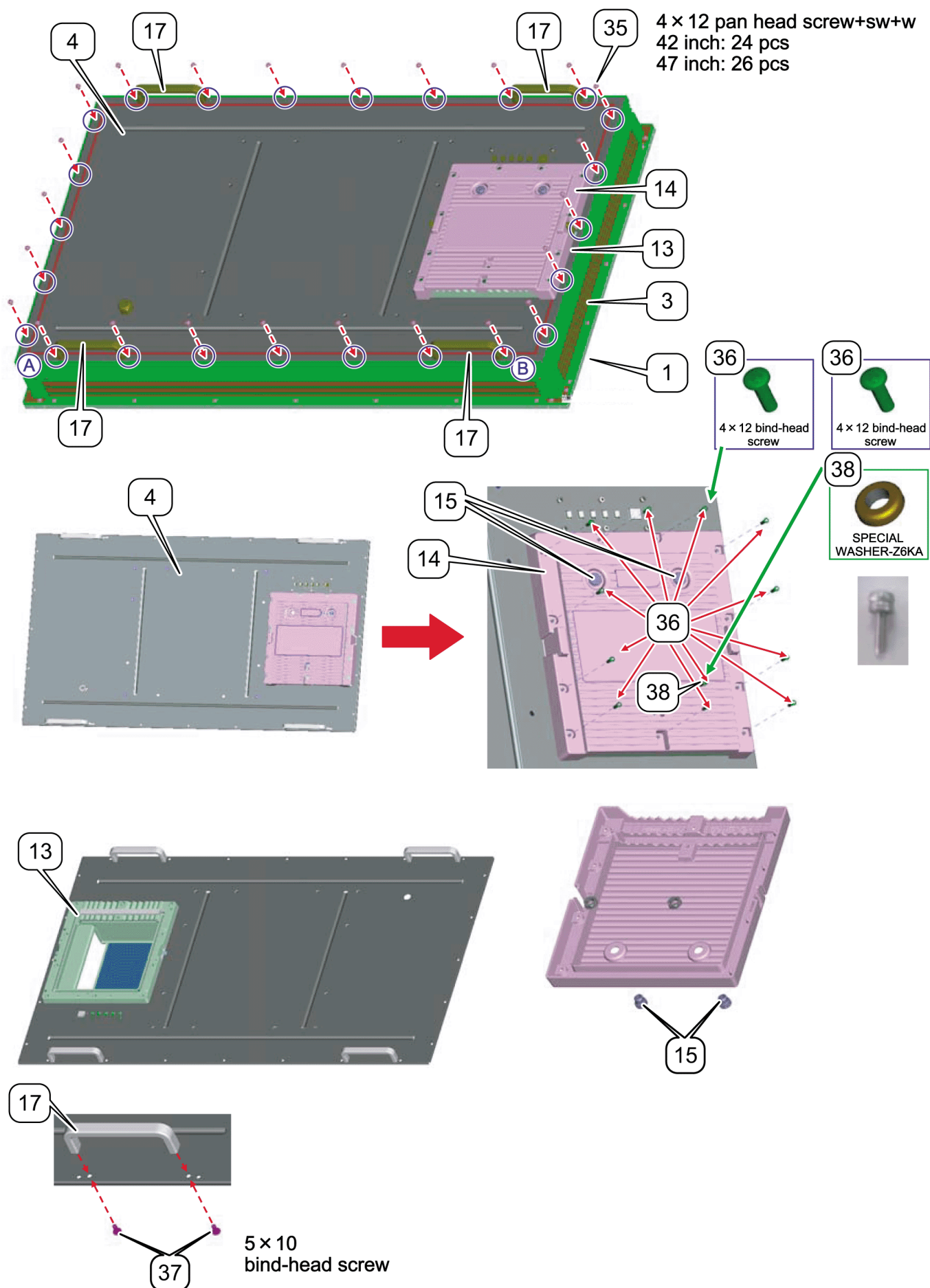
11.1.1.1. Cabinet front



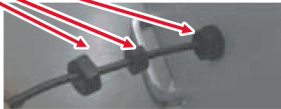
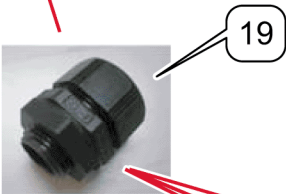
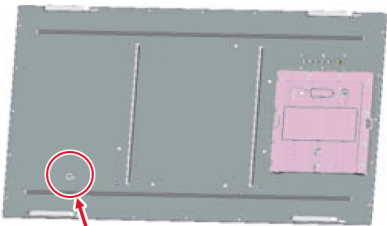
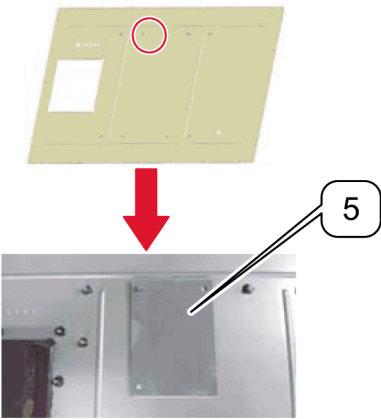
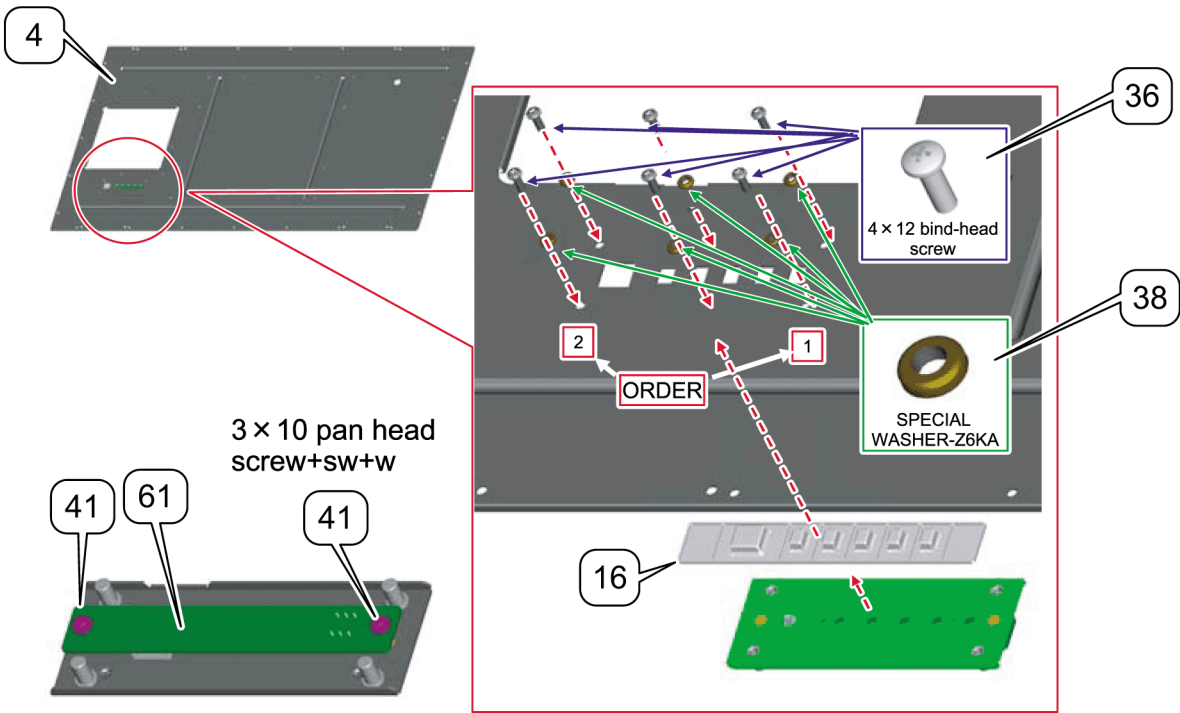
11.1.1.2. Cabinet back



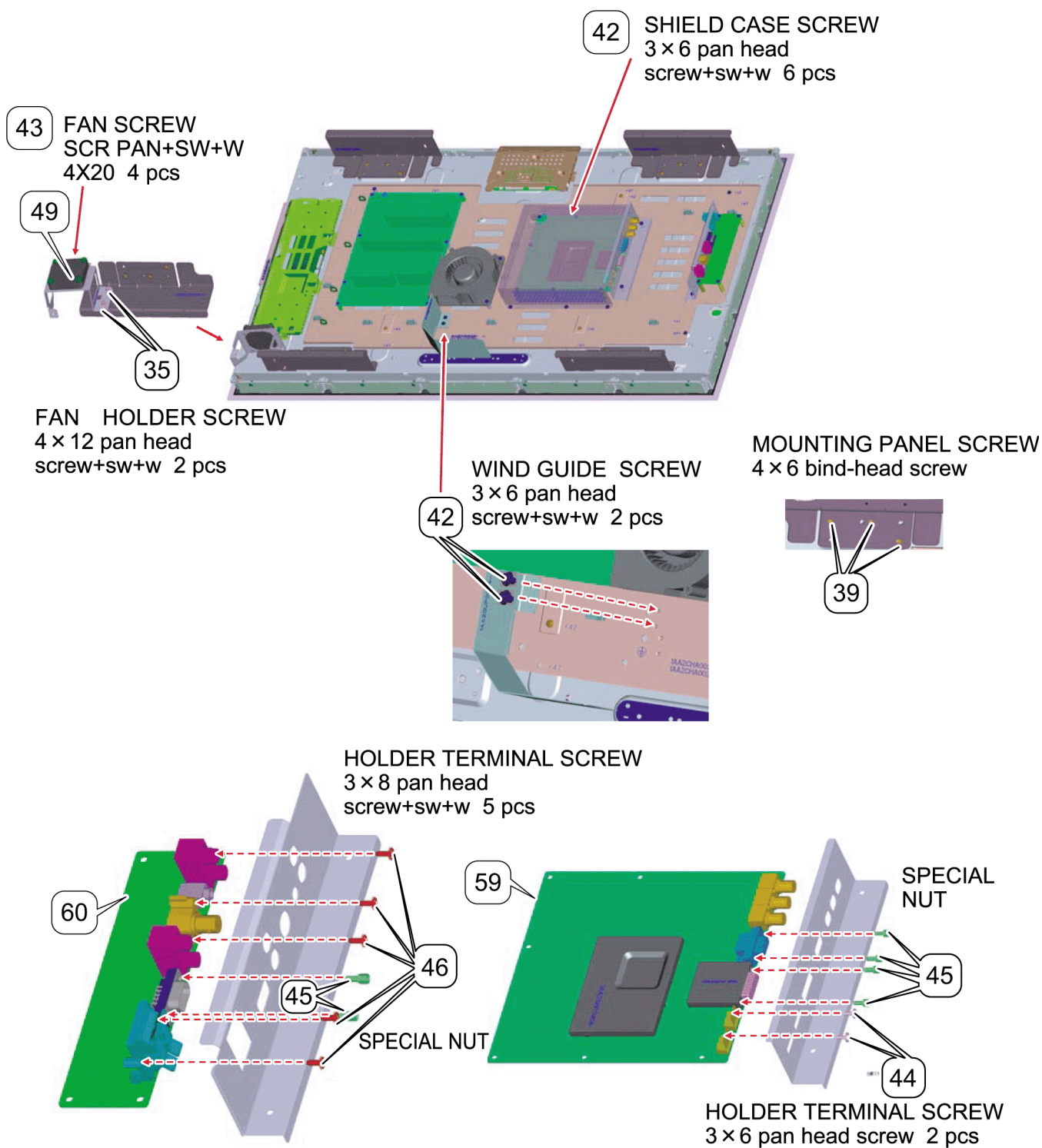
11.1.1.3. Rear prate (1)



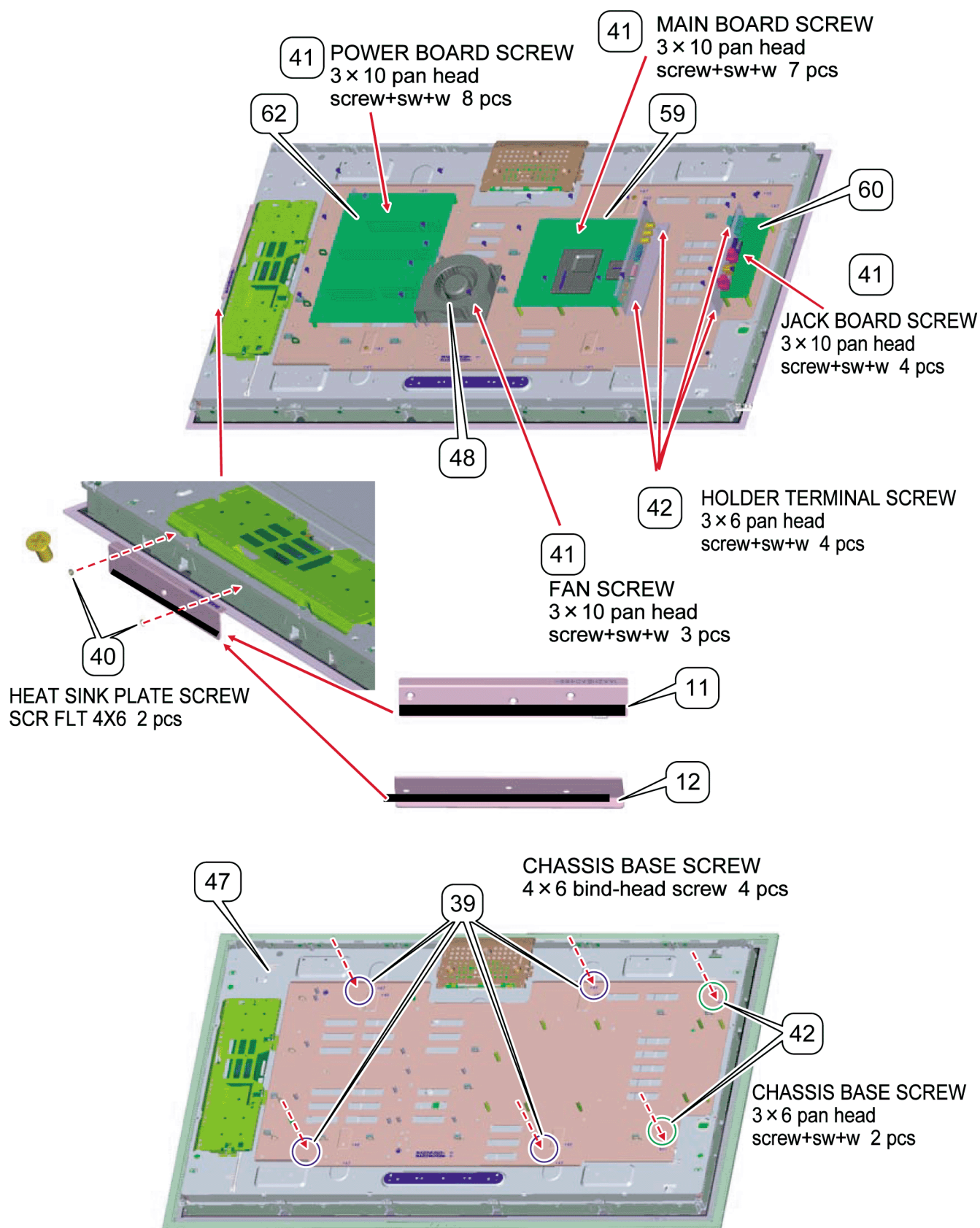
11.1.1.4. Rear prate (2)



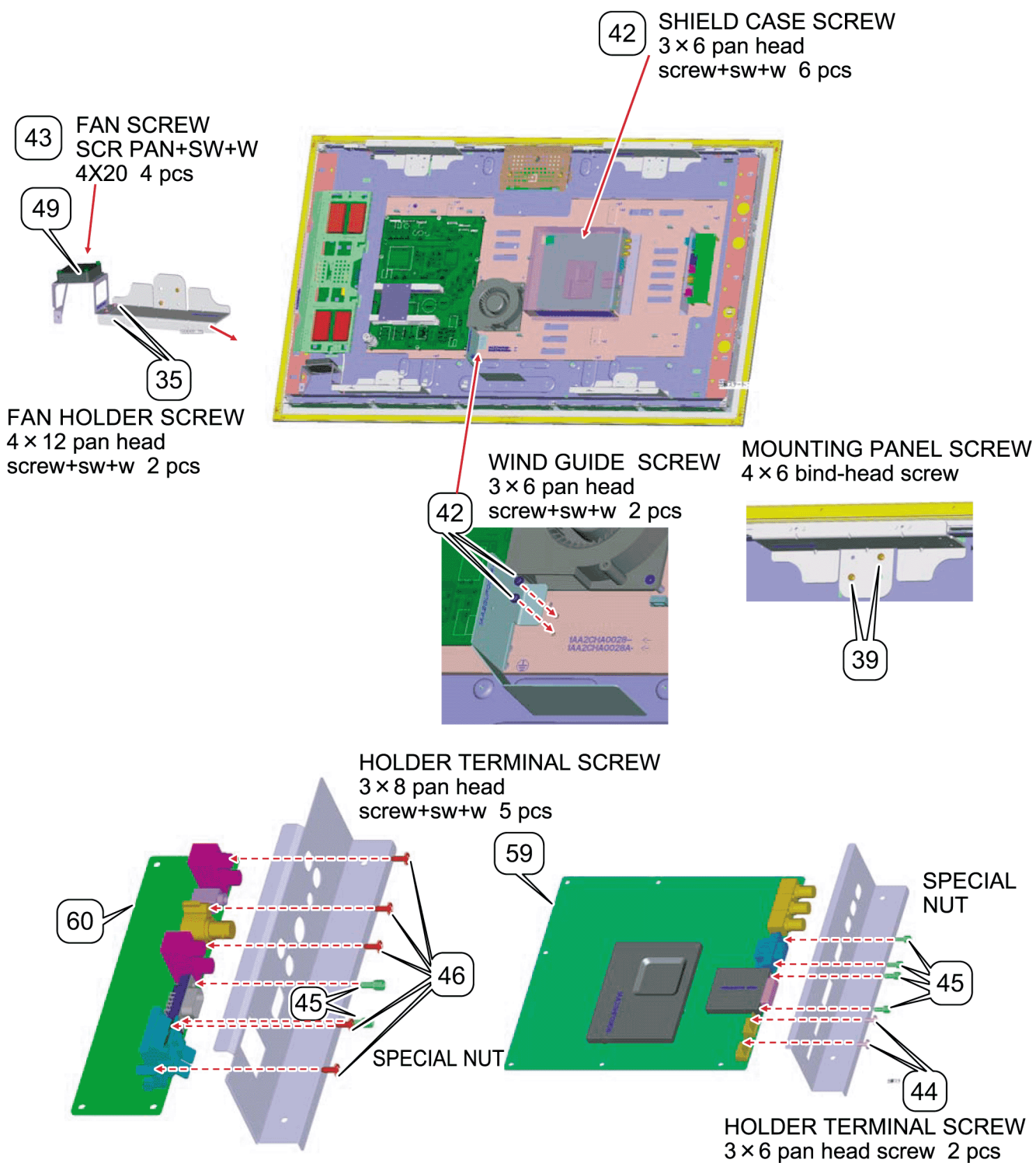
11.1.1.5. Screws for board (42") (1)



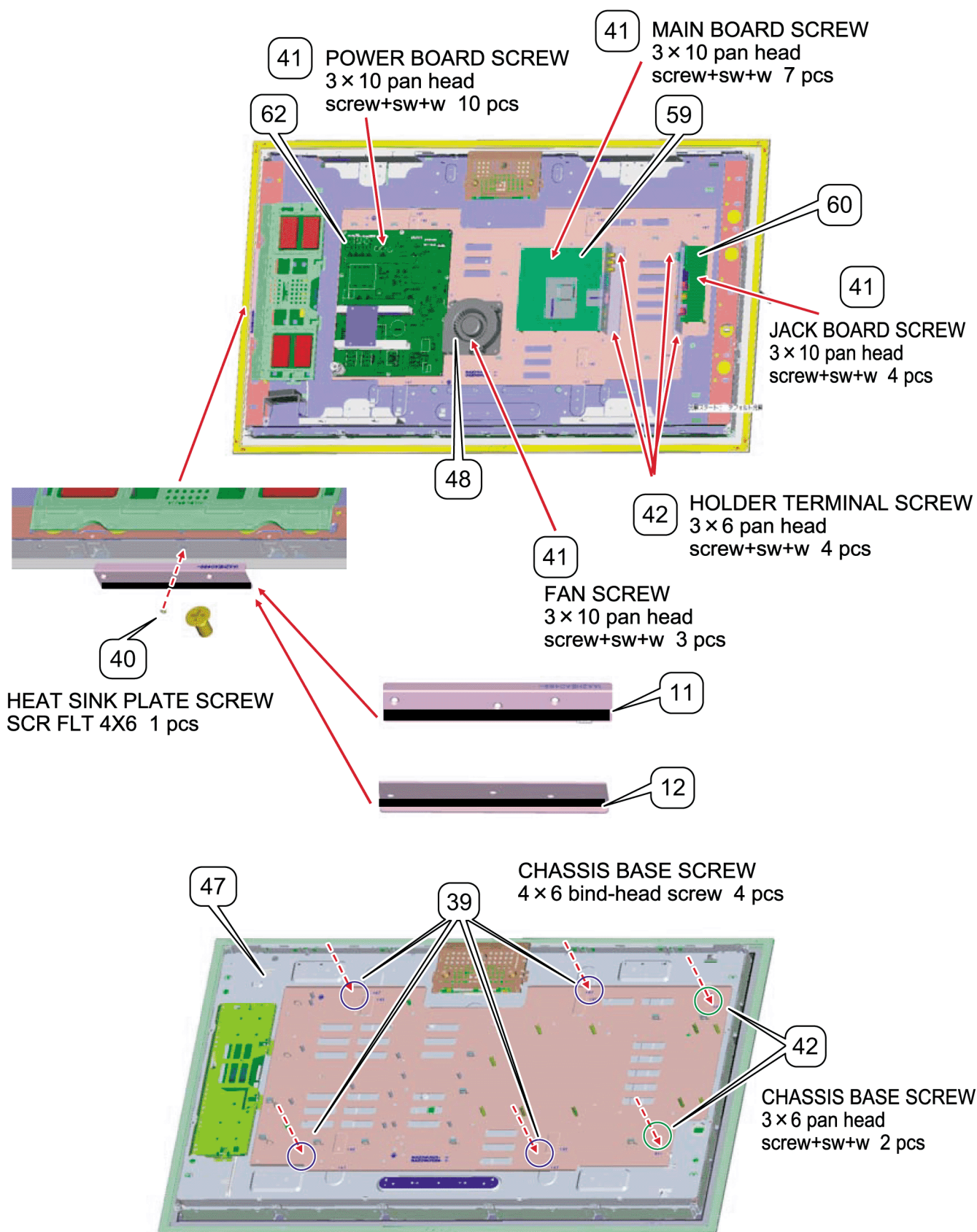
11.1.1.6. Screws for board (42") (2)



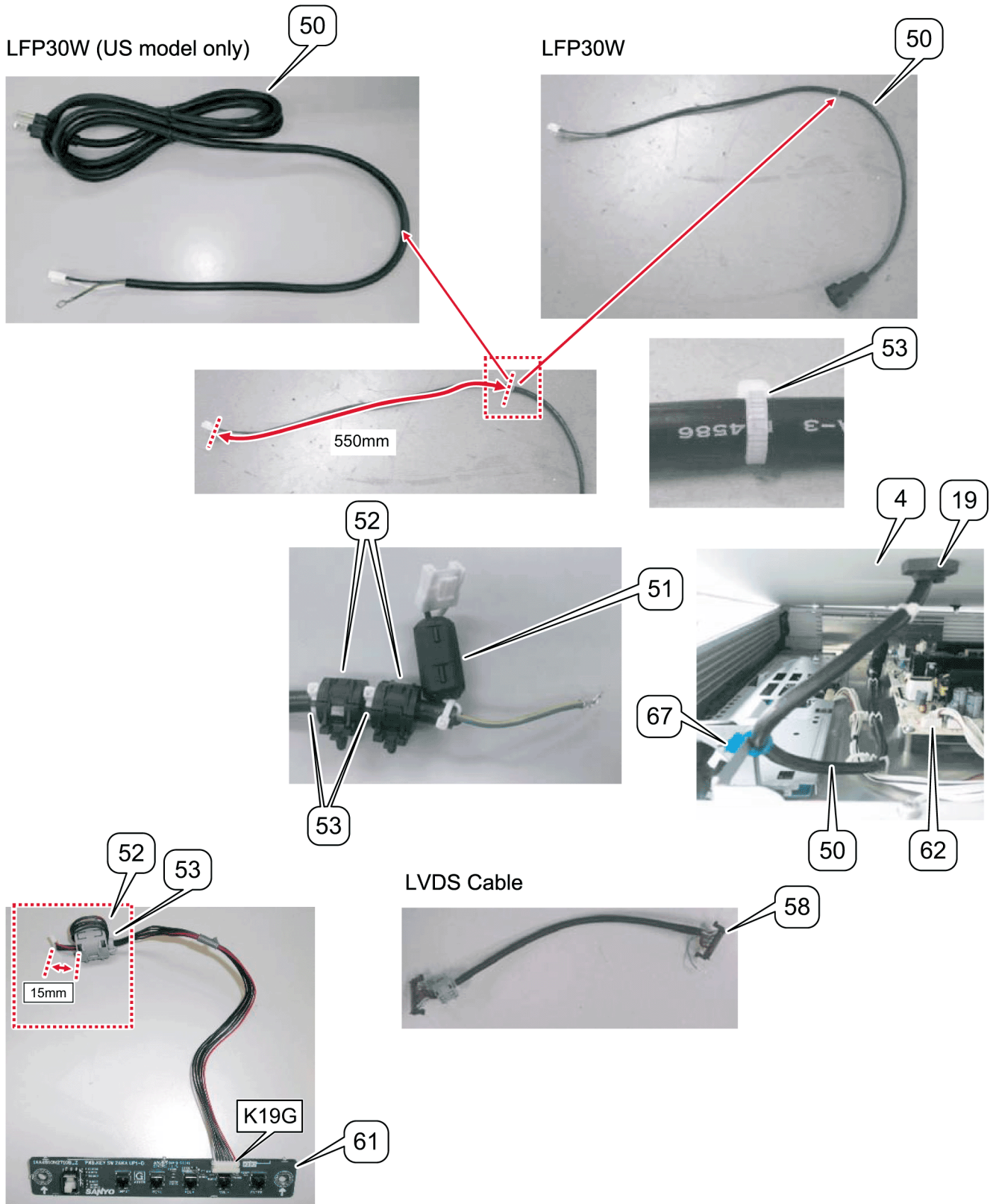
11.1.1.7. Screws for board (47") (1)



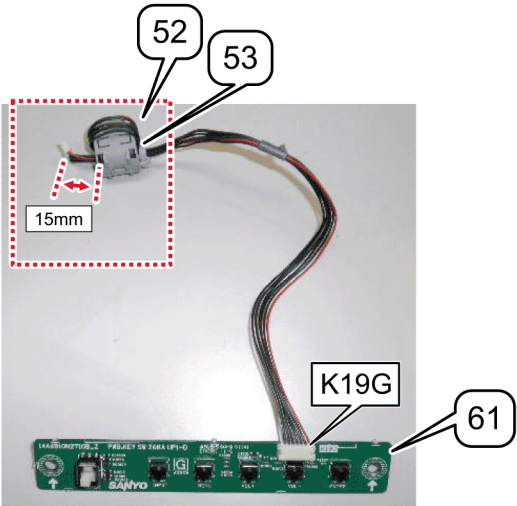
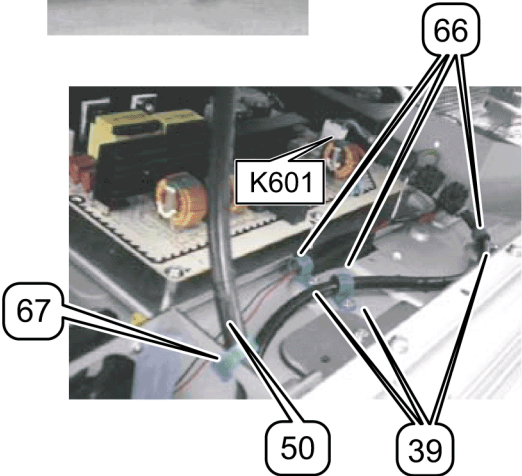
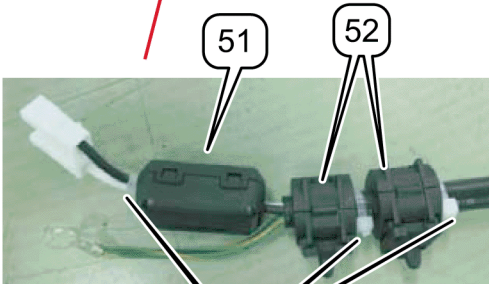
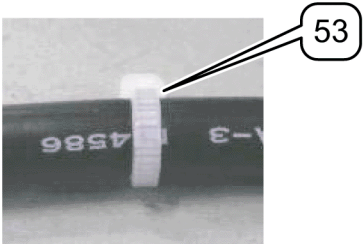
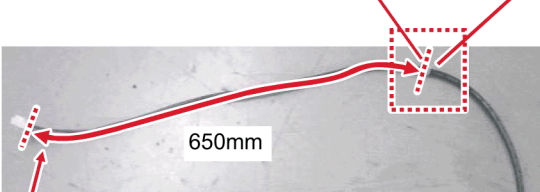
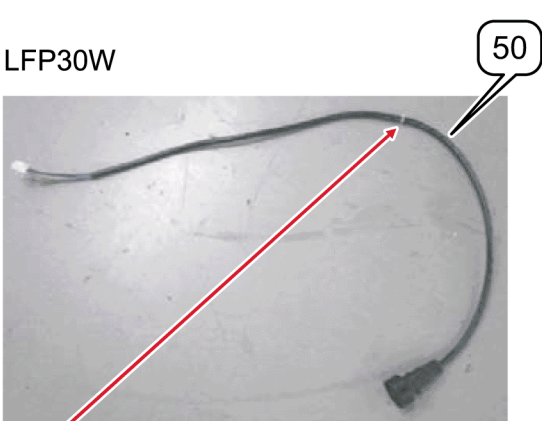
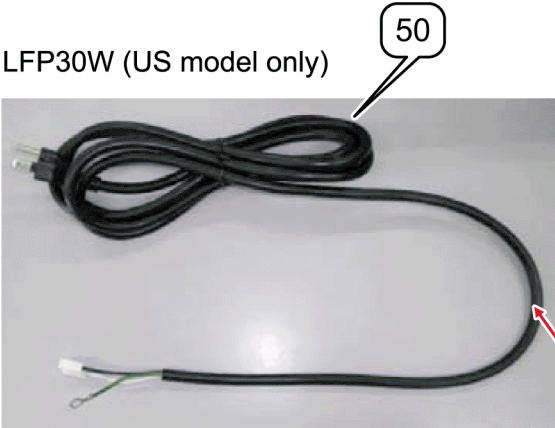
11.1.1.8. Screws for board (47") (2)



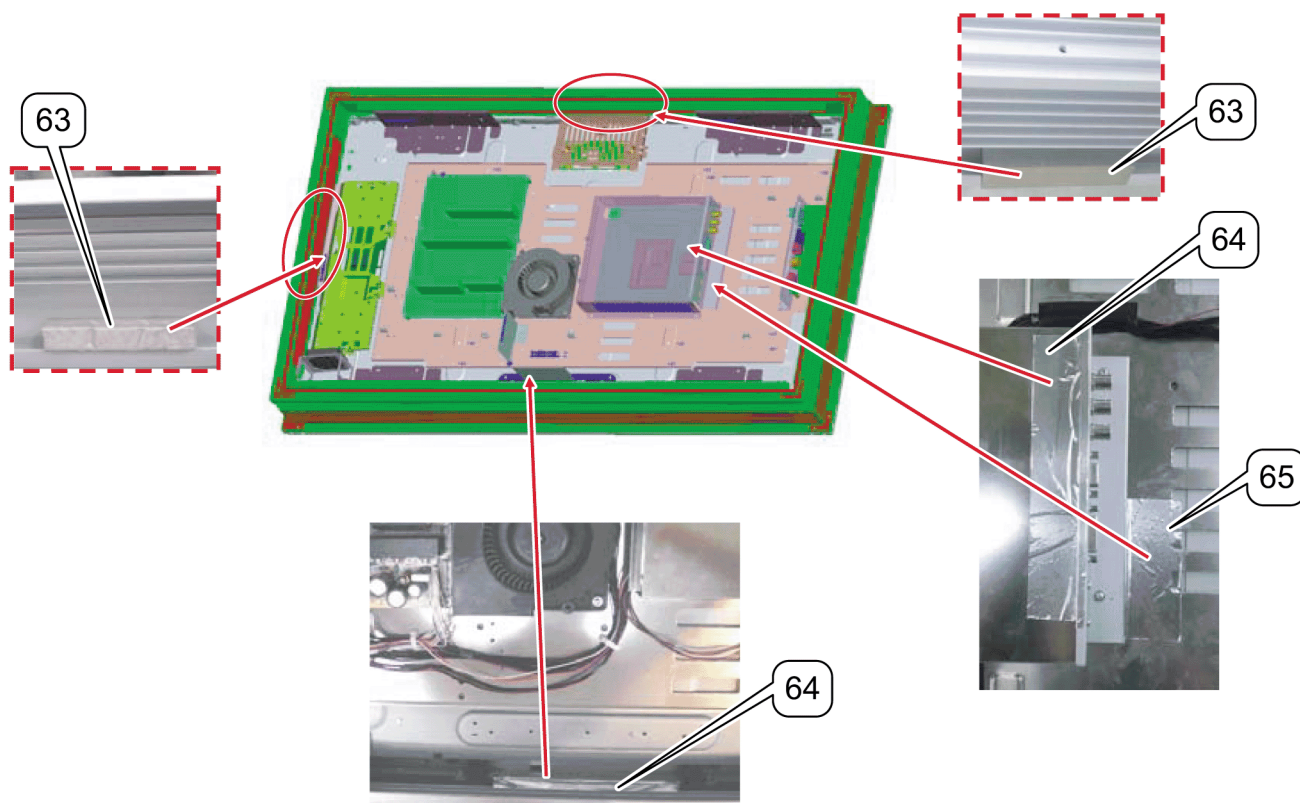
11.1.1.9. AC cord (42")



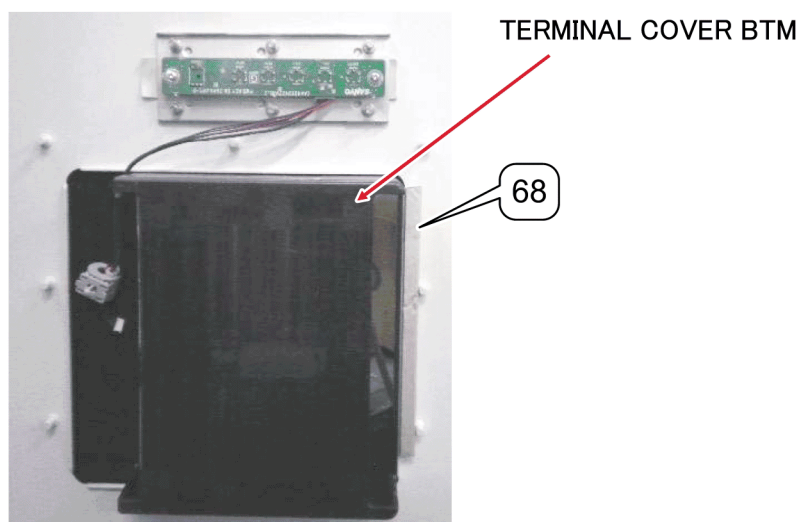
11.1.1.10. AC cord (47")



11.1.1.11. EMC parts

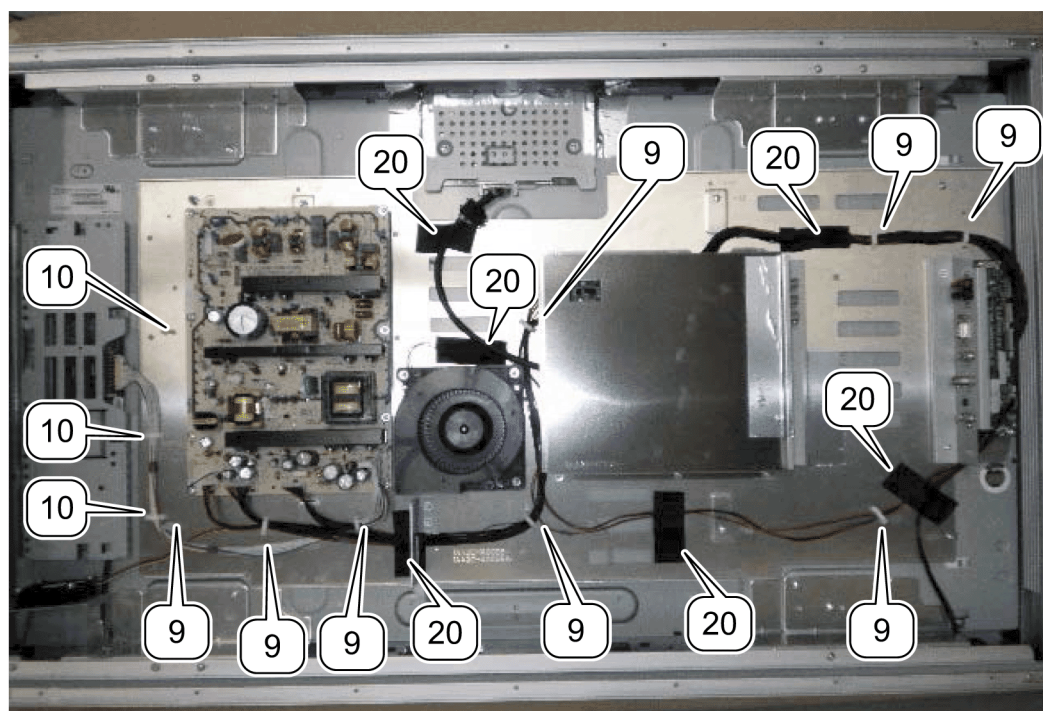


47 inch model only

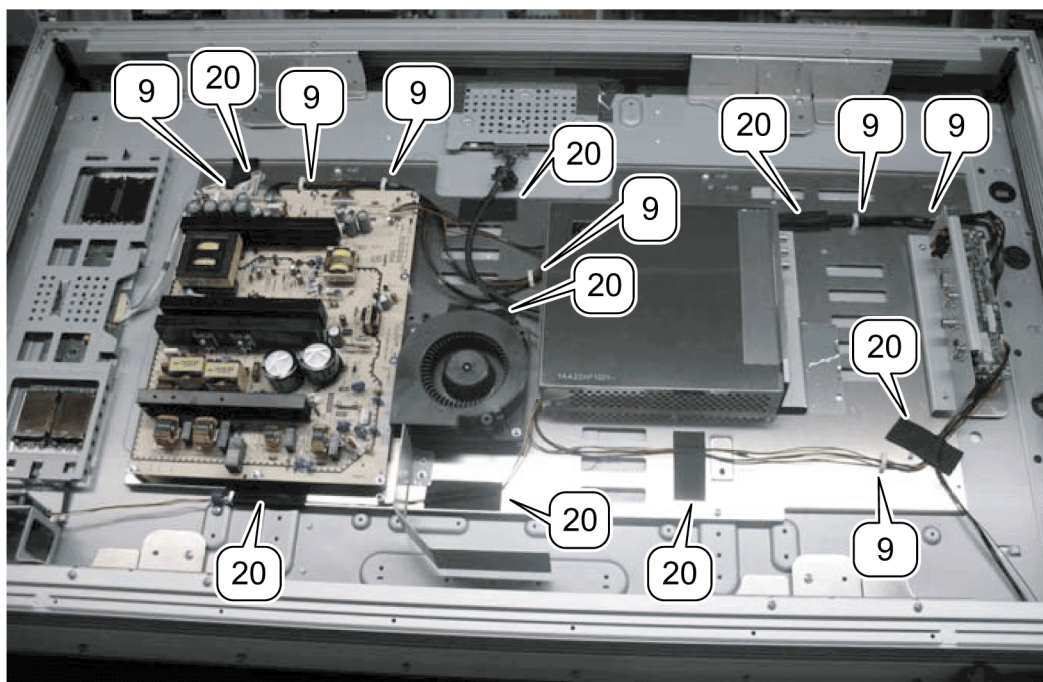


11.1.1.12. Hook and Tape

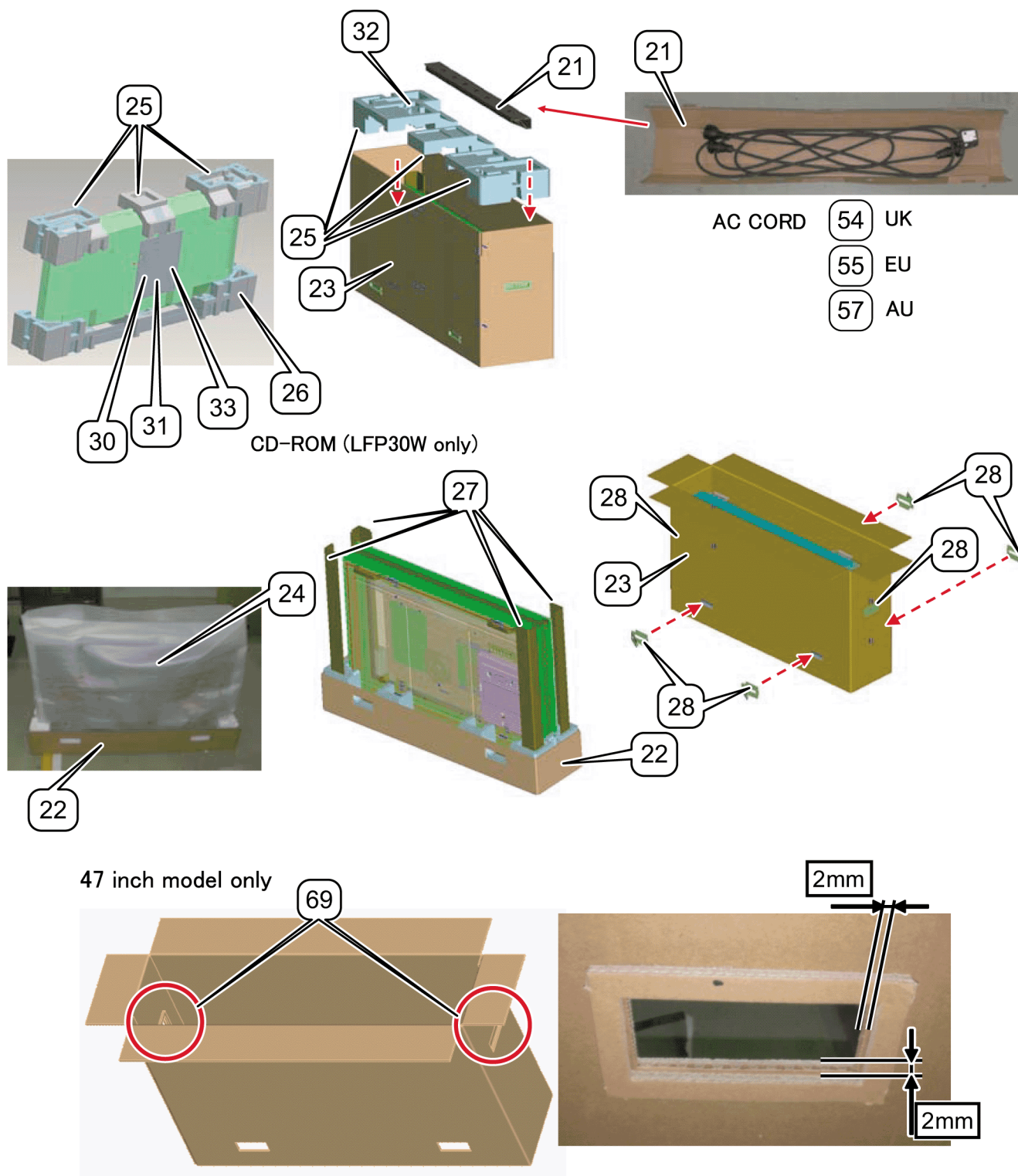
42 inch nodel



47 inch nodel



11.1.1.13. Packing



11.2. Mechanical Replacement Parts List (42 inch)

Note 1: All parts are supplied by PAVCKM.

Note 2: WU, WA or W indicated in Remarks column shows the different parts for each Destination.

WU, WA or W can be confirmed by Manufacturing ID No. indicated in Model Name Plate.

TH-42/47LFP30WU : North and Latin America

TH-42/47LFP30WA : Oceania

TH-42/47LFP30W : Other

Safety	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
△	1	T6103583976	CABINET FRONT ASSY	1	
	2	T6103569420	PANASONIC BADGE LOGO SHEET	1	
△	3	T6103583983	CABINET BACK ASSY	1	
△	4	T6103584522	REAR PLATE ASSY	1	
	5	T6103584546	ABSORPTION, MOISTURE ASSY	1	
△	6	T6103562841	REAR PLATE RUBBER	1	
△	7	T6103562858	CABINET RUBBER	1	
	9	T6451044594	FIXER CLAMP	8	
	10	T6450148002	FIXER CLAMP	3	
	11	T6103579979	HEAT SINK SHEET	1	
	12	T6103579986	HEAT SINK SHEET	1	
△	13	T6103584157	AV COVER ASSY (BOTTOM)	1	
△	14	T6103584539	AV COVER ASSY (TOP)	1	
△	15	T6103456218	GORETEX HI AIR-FLOW VENT	2	
△	16	T6103563381	CONTROL BUTTONS	1	
	17	T6103462806	ALUMINIUM HANDLE	4	
	18	T9450572778	FIXER CABLE, L=212.2 (PP)	1	
△	19	T6451051998	FIXER CLAMP, SCL-B18/8.0-1ST	1	
	20	T6550022554	ADHESIVE CLOTH TAPE	6	
	21	T6103567211	CASE ACCESSORIES	1	
	22	T6103563046	CARTON BOX (BOTTOM)	1	
	23	T6103588506	CARTON BOX (TOP)	1	W/WA
	23	T6103591872	CARTON BOX (TOP)	1	WU
	24	T6103563053	JIFFY BAG	1	
	25	T6103563060	CUSHION TOP	1	
	26	T6103563077	CUSHION BOTTOM	1	
	27	T6103568140	REINFORCEMENT	4	
	28	T6550022240	SEALING JOINT	6	
	30	T6103577395	POLY BAG (MANUAL)	1	
	31	T6103565392	SETUP GUIDE (GERMAN)	1	W
	31	T6103590745	SETUP GUIDE (FRENCH)	1	WU
	32	N2QAYB000535	REMOTE CONTROL	1	
	33	T6103589633	CD-ROM, OWNERS MANUAL	1	W/WA
	33	T6103590738	CD-ROM, OWNERS MANUAL	1	WU
	34	T4120807907	SPECIAL SCREW	4	
	35	T4120808003	SPECIAL SCREW	62	
	36	T4120808102	SPECIAL SCREW	28	
	37	T4120808300	SPECIAL SCREW	8	
△	38	T4120808409	SPECIAL WASHER	7	
	39	T4111899003	SCREW BIN 4X6	16	
	40	T4112225702	SCREW FLT 4X6	2	
	41	T4111926709	SCREW PAN+SW+W 3X10	24	

Safety	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	42	T4111925207	SCREW PAN+SW+W 3X6	14	
	43	T4111923807	SCREW PAN+SW+W 4X20	4	
	44	T4110418601	SCREW PAN 3X6	2	
	45	T3120730406	SPECIAL SCREW	6	
	46	T4110759407	SCREW TPG BRZ 3X8	5	
△	47	T6451052605	LCD PANEL	1	
△	48	T6451039880	MOTOR, BLW DC 9.96W	1	
△	49	T6451052018	MOTOR, FAN DC 1.44W	1	
△	50	T6103593401	POWER CORD-3.0MK (US model only)	1	WU
△	50	T6520036949	POWER CORD-811MM (Inside a set)	1	W/WA
	51	T9520015495	CORE, CLAMP	1	
	52	T9520019042	CORE, CLAMP	3	
	53	T6450045387	FIXER CABLE TIES, L100	4	
△	54	T6520036994	POWER CORD-2110MM (UK Type)	1	W
△	55	T6520036987	POWER CORD-2600MM (EU Type)	1	W
△	57	T6520036963	POWER CORD-2586MM (AUS Type)	1	WA
	58	T6520037014	LVDS CABLE (51P-51P)	1	Chap.10.3.6
	63	T6103582061	GASKET 20X20X80	2	
	64	T6103593296	T-ALUMINUM	2	
	65	T6103593302	T-ALUMINUM	1	
	67	T6451052353	FIXER CABLE TIES (PANTAI)	1	
	31	T6103569024	SETUP GUIDE (ARABIC)	1	W
	31	T6103565453	SETUP GUIDE (DANISH)	1	W
	31	T6103565408	SETUP GUIDE (DUTCH)	1	W
	31	T6103565460	SETUP GUIDE (ENGLISH)	1	W/WA
	31	T6103590769	SETUP GUIDE (ENGLISH)	1	WU
	31	T6103580104	SETUP GUIDE (FINNISH)	1	W
	31	T6103565422	SETUP GUIDE (FRENCH)	1	W
	31	T6103565415	SETUP GUIDE (ITALIAN)	1	W
	31	T6103589671	SETUP GUIDE (KAZAKHSTAN)	1	W
	31	T6103580098	SETUP GUIDE (NORWEGIAN)	1	W
	31	T6103589657	SETUP GUIDE (RUSSIAN)	1	W
	31	T6103565439	SETUP GUIDE (SPANISH)	1	W
	31	T6103590752	SETUP GUIDE (SPANISH)	1	WU
	31	T6103565446	SETUP GUIDE (SWEDISH)	1	W

Safety	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	31	T6103589664	SETUP GUIDE (UKRAINIAN)	1	W
		T6520036789	NON STANDARD WIRE ASSY (POWER KIN1 - LCD PANEL CN1)	1	Chap.10.3.3
		T6103575315	STANDARD WIRE (MAIN K72D - JACK K10D)	1	Chap.10.4.9
		T6103575285	STANDARD WIRE (MAIN K72E - JACK K10E)	1	Chap.10.4.9
		T6103556253	STANDARD WIRE (MAIN K8F - JACK K19F)	1	Chap.10.4.9
		T6103575247	STANDARD WIRE (POWER K6A - MAIN K16A)	1	Chap.10.3.4
		T6103575230	STANDARD WIRE ASSY (JACK K39G - KEY SW K19G)	1	Chap.10.4.10
		T6103575261	STANDARD WIRE ASSY (JACK K39H - RC-LED K19H)	1	
		T6103575360	STANDARD WIRE ASSY (MAIN KSPL - JACK K001L)	1	Chap.10.4.8
		T6103575353	STANDARD WIRE ASSY (MAIN KSPR - JACK K001R)	1	Chap.10.4.8
		T6103575339	STANDARD WIRE ASSY (POWER K6B - MAIN K16B)	1	Chap.10.3.5
		T6103575292	STANDARD WIRE ASSY (POWER K6C - MAIN K16C)	1	Chap.10.3.7

11.3. Mechanical Replacement Parts List (47 inch)

Note 1: All parts are supplied by PAVCKM.

Note 2: WU, WA or W indicated in Remarks column shows the different parts for each Destination.

WU, WA or W can be confirmed by Manufacturing ID No. indicated in Model Name Plate.

TH-42/47LFP30WU : North and Latin America

TH-42/47LFP30WA : Oceania

TH-42/47LFP30W : Other

Safety	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
△	1	T6103590462	CABINET FRONT ASSY	1	
	2	T6103569420	PANASONIC BADGE LOGO SHEET	1	
△	3	T6103590479	CABINET BACK ASSY	1	
△	4	T6103590493	REAR PLATE ASSY	1	
	5	T6103584546	ABSORPTION, MOISTURE ASSY	1	
△	6	T6103564029	REAR PLATE RUBBER	1	
△	7	T6103564036	CABINET RUBBER	1	
	9	T6451044594	FIXER CLAMP	7	
	11	T6103579979	HEAT SINK SHEET	1	
	12	T6103579986	HEAT SINK SHEET	1	
△	13	T6103584157	AV COVER ASSY (BOTTOM)	1	
△	14	T6103584539	AV COVER ASSY (TOP)	1	
△	15	T6103456218	GORETEX HI AIR-FLOW VENT	2	
△	16	T6103563381	CONTROL BUTTONS	1	
	17	T6103462806	ALUMINIUM HANDLE	4	
	18	T9450572778	FIXER CABLE, L=212.2 (PP)	1	
△	19	T6451051998	FIXER CLAMP, SCL-B18/8.0-1ST	1	
	20	T6550022554	ADHESIVE CLOTH TAPE	8	
	21	T6103568133	CASE ACCESSORIES	1	
	22	T6103570754	CARTON BOX (BOTTOM)	1	
	23	T6103588513	CARTON BOX (TOP)	1	W/WA
	23	T6103591889	CARTON BOX (TOP)	1	WU
	24	T6103573885	JEFFY BAG	1	
	25	T6103563060	CUSHION TOP	1	
	26	T6103563077	CUSHION BTM	1	
	27	T6103568157	REINFORCEMENT	4	
	28	T6550022240	SEALING JOINT-N5LA	6	
	30	T6103577395	POLY BAG (MANUAL)	1	
	31	T6103590745	SETUP GUIDE (FRENCH)	1	WU
	31	T6103565392	SETUP GUIDE (GERMAN)	1	W
	32	N2QAYB000535	REMOTE CONTROL	1	
	33	T6103589633	CD-ROM, OWNERS MANUAL	1	W/WA
	33	T6103590738	CD-ROM, OWNERS MANUAL	1	WU
	34	T4120807907	SPECIAL SCREW	4	
	35	T4120808003	SPECIAL SCREW	65	
	36	T4120808102	SPECIAL SCREW	28	
	37	T4120808300	SPECIAL SCREW	8	
△	38	T4120808409	SPECIAL WASHER	7	
	39	T4111899003	SCREW BIN 4X6	16	
	40	T4112225702	SCREW FLT 4X6	2	
	41	T4111926709	SCREW PAN+SW+W 3X10	26	

Safety	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	42	T4111925207	SCREW PAN+SW+W 3X6	14	
	43	T4111923807	SCREW PAN+SW+W 4X20	4	
	44	T4110418601	SCREW PAN 3X6	2	
	45	T3120730406	SPECIAL SCREW	6	
	46	T4110759407	SCREW TPG BRZ 3X8	5	
△	47	T6451052612	LCD PANEL	1	
△	48	T6451039880	MOTOR, BLW DC 9.96W	1	
△	49	T6451052018	MOTOR, FAN DC 1.44W	1	
△	50	T6520036949	POWER CORD-811MM (Inside a set)	1	W/WA
△	50	T6103593418	POWER CORD-3.0MK (US model only)	1	WU
	51	T9520015495	CORE, CLAMP	1	
	52	T9520019042	CORE, CLAMP	3	
	53	T6450045387	FIXER CABLE TIES, L100	5	
△	54	T6520036994	POWER CORD-2110MM (UK Type)	1	W
△	55	T6520036987	POWER CORD-2600MM (EU Type)	1	W
△	57	T6520036963	POWER CORD-2586MM (AUS Type)	1	WA
	58	T6520037014	LVDS CABLE (51P-51P)	1	
	63	T6103582061	GASKET 20X20X80	2	
	64	T6103593296	T-ALUMINUM	2	
	65	T6103593302	T-ALUMINUM	1	
	66	T6451050410	FIXER CLAMP, KCA-64	3	
	67	T6451052353	FIXER CABLE TIES (PANTAI)	1	
	68	T6103589282	GASKET EMC-Z6LA	1	
	69	T6103588957	REINFORCEMENT, HANDLE	2	
	31	T6103565453	SETUP GUIDE (DANISH)	1	W
	31	T6103565408	SETUP GUIDE (DUTCH)	1	W
	31	T6103565460	SETUP GUIDE (ENGLISH)	1	W/WA
	31	T6103590769	SETUP GUIDE (ENGLISH)	1	WU
	31	T6103580104	SETUP GUIDE (FINNISH)	1	W
	31	T6103565422	SETUP GUIDE (FRENCH)	1	W
	31	T6103565415	SETUP GUIDE (ITALIAN)	1	W
	31	T6103589671	SETUP GUIDE (KAZAKHSTAN)	1	W
	31	T6103580098	SETUP GUIDE (NORWEGIAN)	1	W
	31	T6103589657	SETUP GUIDE (RUSSIAN)	1	W
	31	T6103565439	SETUP GUIDE (SPANISH)	1	W
	31	T6103590752	SETUP GUIDE (SPANISH)	1	WU

Safety	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	31	T6103565446	SETUP GUIDE (SWEDISH)	1	W
	31	T6103589664	SETUP GUIDE (UKRAINIAN)	1	W
	31	T6103569024	SETUP GUIDE (ARABIC)	1	W
		T6520036796	NON STANDARD WIRE ASSY (POWER KIN1 - LCD PANEL CN1)	1	Chap.10.6.3
		T6103575315	STANDARD WIRE (MAIN K72D - JACK K10D)	1	Chap.10.7.9
		T6103575285	STANDARD WIRE (MAIN K72E - JACK K10E)	1	Chap.10.7.9
		T6103556253	STANDARD WIRE (MAIN K8F - JACK K19F)	1	Chap.10.7.9
		T6103575254	STANDARD WIRE (POWER K6A - MAIN K16A)	1	Chap.10.6.4
		T6103575230	STANDARD WIRE ASSY (JACK K39G - KEY SW K19G)	1	Chap.10.7.10
		T6103575278	STANDARD WIRE ASSY (JACK K39H - RC-LED K19H)	1	
		T6103575353	STANDARD WIRE ASSY (MAIN KSPR - JACK K001R)	1	Chap.10.7.8
		T6103575346	STANDARD WIRE ASSY (POWER K6B - MAIN K16B)	1	Chap.10.7.5
		T6103575308	STANDARD WIRE ASSY (POWER K6C - MAIN K16C)	1	Chap.10.6.7
		T6103575360	STANDARD WIRE ASSYMAIN (KSPL - JACK K001L)	1	Chap.10.7.8

11.4. Electrical Replacement Boards list (42 inch)

Note: All boards are Non serviceable.

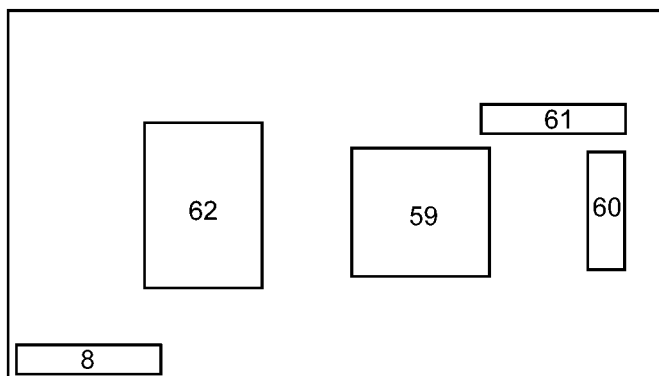
Safety	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
△	8	T6103584140	CIRCUIT BOARD (RC+LED)	1	
△	59	T6103593289	CIRCUIT BOARD (MAIN)	1	
△	60	T6103565200	CIRCUIT BOARD (JACK)	1	
△	61	T6103565217	CIRCUIT BOARD (KEY SW)	1	
△	62	T6103565071	CIRCUIT BOARD (POWER)	1	

11.5. Electrical Replacement Boards list (47 inch)

Note: All boards are Non serviceable.

Safety	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
△	8	T6103584140	CIRCUIT BOARD RC+LED	1	
△	59	T6103593289	CIRCUIT BOARD (MAIN)	1	
△	60	T6103565200	CIRCUIT BOARD (JACK)	1	
△	61	T6103565217	CIRCUIT BOARD (KEY SW)	1	
△	62	T6103565088	CIRCUIT BOARD (POWER)	1	

11.6. Boards Layout



※8 is attached to the Cabinet back.

※61 is attached to the Back plate.

Ref.No.	Board Name	Function	Remarks
8	RC+LED	Remote Receiver, LED, Brightness Sensor	All boards are Non serviceable.
59	MAIN	Main, Audio & Video Signal Processor, HDMI in, DVI in, PC in	
60	JACK	AV Terminal	
61	KEY SW	Control Button	
62	POWER	Power (AC/DC), DC-DC	